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ANNUAL REPORT

COMMISSIONER OF PATENTS

1887-1888

43D CONGRESS, }
1st Session. }

SENATE.

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ANNUAL REPORT

OF THE

COMMISSIONER OF PATENTS

FOR

THE YEAR 1873.

FEBRUARY 2, 1874.—Ordered to lie on the table and be printed.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1874.



LETTER
FROM
THE COMMISSIONER OF PATENTS,
TRANSMITTING HIS
REPORT FOR THE YEAR ENDING DECEMBER 31, 1873.

UNITED STATES PATENT OFFICE,
Washington, D. C., January 31, 1874.

SIR: I have the honor herewith to submit my Annual Report for the year 1873.
Very respectfully,

M. D. LEGGETT,
Commissioner of Patents.

Hon. M. H. CARPENTER,
President pro tempore United States Senate.

1877

1877

THE COMMISSION OF PATENTS

REPORT OF THE COMMISSIONER OF PATENTS

FOR THE YEAR ENDING MARCH 31, 1877

WASHINGTON: GPO: 1877.
The Commission of Patents was organized by the Act of March 3, 1877, and has since that time been engaged in the study and investigation of the subject of patents. It has held numerous public hearings, and has received many suggestions from inventors and the public. It has also conducted extensive research into the various questions connected with the administration of the patent laws. The results of its investigations are here presented in this report.

THE COMMISSIONER OF PATENTS
FOR THE YEAR 1871

REPORT OF THE COMMISSIONER.

REPORT OF THE COMMISSIONER

OF THE LAND OFFICE

ANNUAL REPORT

OF

THE COMMISSIONER OF PATENTS

FOR THE YEAR 1873.

To the Senate and House of Representatives of the United States of America in Congress assembled:

I submit the following as my annual report for the year ending December 31, 1873, in compliance with section 9 of the patent act.

1. Statement of moneys received.

Amount received on applications for patents, reissues, extensions, caveats, disclaimers, appeals, and trade-marks.....	\$626,170 00
Amount received for copies of specifications, drawings, and other papers.....	67,171 32
Amount received for recording assignments.....	9,850 45
Total.....	703,191 77

2. Statement of moneys expended.

Amount paid for salaries.....	\$461,277 99
Amount paid for photolithographing current issues.....	38,110 55
Amount paid for illustrations for Gazette.....	44,972 28
Amount paid for photolithographing back issues.....	52,485 30
Amount paid for contingent and miscellaneous expenses, viz:	
Advertising.....	\$3,530 83
Stationery.....	16,786 03
Painting, glazing, varnishing, paper-hanging, etc.....	694 71
Furniture, carpeting, etc.....	6,165 19
Fitting up cases in model rooms, carpenter's work, and repairing furniture.....	14,018 80
Plumbing and gas-fitting.....	812 65
English patents and foreign periodicals.....	2,448 50
Work on report and indexes.....	1,670 00
Refunding money paid by mistake.....	1,045 00
Hardware.....	1,427 85
Pay of temporary employes.....	25,856 62
Miscellaneous items, viz: Books for library, subscriptions to journals, freight, ice, washing towels, awnings, withdrawals, repairing carriage and harness, keeping horse, etc.....	19,876 95
Total.....	691,178 98

3. Statement of the balance in the Treasury of the United States on account of the patent fund.

Amount to the credit of the patent fund, January 1, 1873.....	\$794,111 42
Amount of receipts during the year 1873.....	703,191 77
Total.....	1,497,303 19
From which deduct expenditures for the year 1873.....	691,178 98
Balance January 1, 1874.....	806,124 21

4. Statement of the business of the Office for the year 1873.

Number of applications for patents during the year 1873.....	20,414
Number of patents issued, including reissues and designs.....	12,864

Number of applications for extension of patents.....	273
Number of patents extended.....	233
Number of caveats filed during the year.....	3,248
Number of patents expired during the year.....	4,482
Number of patents allowed but not issued for want of final fee.....	2,783
Number of applications for registering of trade-marks.....	534
Number of trade-marks registered.....	492
Of the patents granted there were to—	
Citizens of the United States.....	12,371
Subjects of Great Britain.....	341
Subjects of France.....	64
Subjects of other foreign governments.....	88
Total.....	12,864

5. Number of patents issued by the United States Patent Office to residents of the different States and Territories from January 1, 1873, to December 31, 1873.

[The proportion of patents to population is shown in last column.]

States, &c.	No. of patents.	One to every—
Alabama.....	43	23,185
Arkansas.....	11	44,042
California.....	251	2,232
Colorado Territory.....	8	4,983
Connecticut.....	622	864
Dakota Territory.....	2	7,090
Delaware.....	40	3,125
District of Columbia.....	109	1,208
Florida.....	8	23,468
Georgia.....	53	22,341
Idaho Territory.....	1	14,999
Illinois.....	844	3,009
Indiana.....	311	5,404
Iowa.....	246	4,854
Kansas.....	75	4,859
Kentucky.....	114	11,590
Louisiana.....	96	7,512
Maine.....	139	4,510
Maryland.....	191	4,088
Massachusetts.....	1,379	1,057
Michigan.....	356	3,326
Minnesota.....	110	3,997
Mississippi.....	55	15,053
Missouri.....	288	5,975
Montana Territory.....	3	6,835
Nebraska.....	28	4,393
Nevada.....	19	2,236
New Hampshire.....	127	2,506
New Jersey.....	614	1,475
New Mexico.....	1	91,874
New York.....	2,826	1,551
North Carolina.....	58	18,472
Ohio.....	832	3,203
Oregon.....	19	4,785
Pennsylvania.....	1,639	2,148
Rhode Island.....	167	1,301
South Carolina.....	25	28,224
Tennessee.....	105	11,986
Texas.....	109	7,510
Utah Territory.....	8	10,848
Vermont.....	87	3,914
Virginia.....	76	16,120
Washington Territory.....	6	3,992
West Virginia.....	42	10,541
Wisconsin.....	217	4,860
Wyoming Territory.....	2	4,559
United States Army.....	8	3,750
United States Revenue-Marine Service.....	1	.....
For the United States at large.....	12,371	3,116

6. Comparative statement of the business of the Office from 1837 to 1873, inclusive.

Year.	Applica- tions.	Caveats filed.	Patents issued.	Cash received.	Cash expended.
1837.....			435	\$29,289 08	\$33,506 98
1838.....			520	42,123 54	37,402 10
1839.....			425	37,260 00	34,543 51
1840.....	765	228	473	38,056 51	39,020 67
1841.....	847	312	495	40,413 01	52,666 87
1842.....	761	391	517	36,505 68	31,241 48
1843.....	819	315	531	35,315 81	30,776 96
1844.....	1,045	380	502	42,509 26	36,244 73
1845.....	1,246	452	502	51,076 14	39,395 65
1846.....	1,272	448	619	50,264 16	46,158 71
1847.....	1,531	553	572	63,111 19	41,878 35
1848.....	1,628	607	660	67,576 69	58,905 84
1849.....	1,955	595	1,070	80,752 98	77,716 44
1850.....	2,193	602	995	86,927 05	80,100 95
1851.....	2,258	760	869	95,738 61	86,916 93
1852.....	2,639	996	1,020	112,656 34	95,916 91
1853.....	2,673	901	958	121,527 45	132,869 83
1854.....	3,324	868	1,902	163,789 84	167,146 32
1855.....	4,435	906	2,024	216,459 35	179,540 33
1856.....	4,960	1,024	2,502	192,588 02	199,931 02
1857.....	4,771	1,010	2,910	196,132 01	211,582 09
1858.....	5,364	934	3,710	203,716 16	193,193 74
1859.....	6,225	1,097	4,538	245,942 15	210,278 41
1860.....	7,653	1,084	4,819	256,352 59	252,820 80
1861.....	4,643	700	3,340	137,354 44	221,491 91
1862.....	5,038	824	3,521	215,754 99	182,810 39
1863.....	6,014	787	4,170	195,593 29	189,414 14
1864.....	6,932	1,063	5,020	240,919 98	229,868 00
1865.....	10,664	1,937	6,616	348,791 84	274,199 34
1866.....	15,269	2,723	9,450	495,665 38	361,724 28
1867.....	21,276	3,597	13,015	646,581 92	639,263 32
1868.....	20,420	3,705	13,378	681,565 86	628,679 77
1869.....	19,271	3,624	13,986	693,145 81	486,430 78
1870.....	19,171	3,273	13,321	669,456 76	557,149 19
1871.....	19,472	3,366	13,033	678,716 46	560,595 08
1872.....	18,246	3,090	13,590	699,726 39	665,591 36
1873.....	20,414	3,248	12,864	703,191 77	691,178 98

By the foregoing exhibit it will be seen that the entire receipts over the expenditures during the year 1873 were \$12,012.79. Of the expenditures \$52,485.03 was for photolithographing back issues, and \$35,000 of the amount paid for salaries was for the tracing of back issues, making \$87,485.03 of the expenditures which were no part of the proper current expenses of the year; and, adding the \$12,012.79, makes the excess of receipts over the proper expenses of the Office for the year 1873, \$99,497.82.

It is proper further to state that the expenditure for photolithographing current issues, \$38,110.55, is made an expense of the Patent Office during this year for the first time. Heretofore the appropriation for this work has been made to the Congressional Printer; consequently the expenditure has not before appeared in the accounts of the Commissioner of Patents.

The expenditure in the reproduction of the drawings of the back issues of patents by the process of photolithography is, in my opinion, a very wise use of the public money; and the amount appropriated for this purpose ought to be increased, that the work may be finished at an early day. This expenditure will in a few years all come back to the Treasury with considerable gain. When completed it will

reduce the work of examining at least fifteen per cent., and the sales of the copies will ultimately more than cover the entire expense of their production.

It will also be seen from the foregoing tables that the number of applications is somewhat larger than the preceding year, while the number of patents granted is a few less. The decrease in the number of patents arises partly from more thorough examinations, and partly from the fact that some applications are not being prosecuted to issue, because of the disturbance in manufacturing caused by financial disturbances.

The act approved July 8, 1870, known as the patent act, embraces all the law now in force pertaining to patents. An experience of three years and a half has shown that the law is defective in some particulars, and additional legislation seems necessary.

The receipts of the Office amount to nearly three quarters of a million dollars annually, all of which is received in small amounts, from ten cents to fifty dollars. This requires the employment of a careful and competent financial clerk. No such officer is provided by law, and it has been customary to detail a clerk of class four for such purpose, and the Commissioner is responsible upon his bonds for the accuracy and integrity of such clerk. I would respectfully recommend that section four of said act be so amended as to provide for one less clerk of class four and for the appointment of a financial clerk, at a salary of two thousand dollars per annum, and require him to give bonds in the sum of five thousand dollars.

The accumulation of models makes the question of room, wherein they can be deposited, one of serious moment. In my last annual report I suggested such amendment of section fourteen as would authorize the Commissioner of Patents, in connection with the Examiners, to look over the various classes, and select such models of rejected applications and expired patents as can safely be spared from the Office without interfering with the proper examination of applications, and deposit the same for safe-keeping with such institutions of learning in various parts of the country as will obligate themselves to take good care of them, and hold them subject to the order of the Commissioner of Patents. With such authority

conferred upon the Commissioner, I am satisfied that the present model gallery will be sufficient to retain the necessary models for many years to come.

Section 23 should be so amended as to require the payment of the final fee in such time that the Office may be enabled to issue a patent within the six months required by law. It is now the custom, to a considerable extent, to deposit the fee, on the very last day of the six months, in some Government depository distant from Washington; and notice is not received at the Office for many days, sometimes weeks and months thereafter. Applicants claim that, having paid the fee within the six months in accordance with the demands of the law, they are entitled to their patents; yet, as the Office received no information of the payment of such fee within the six months, it was impossible to issue a patent in accordance with the law. In this respect the first part of said section and the latter part are not in harmony.

By section 25 persons taking out a patent in a foreign country previous to obtaining one in the United States, the patent obtained here must expire with the patent obtained abroad. By the laws of several foreign states, the foreign patent may expire at the end of two, three, five years, etc.; and under operation of section 25 the American patent must expire at the same time.

The fact that mere first importers of an invention may obtain a patent in several foreign states makes it necessary that, if an American inventor desires to get a foreign patent, he must do so before obtaining one here; otherwise its publication here will enable persons abroad to patent it before the inventor can reach there with it. I see no good reason for this provision in our law. Either a citizen or an alien may obtain a patent here without getting one abroad at all; if so, his patent is in force for seventeen years. I am at a loss to understand why it should be in force any less length of time because of his having obtained a foreign patent. I would suggest that this section be so amended as to make the duration of an American patent entirely independent of the duration of a foreign patent to the same person. It would be an act of justice that such an amendment be retroactive, so as to include all patents issued since July 8, 1870.

Section 29 provides that, if required by the Commissioner, models shall be filed in all cases where the subject-matter of the invention admits of representation by model. Experience has clearly demonstrated that models should be demanded in all cases. An expert in a particular class may be able to comprehend and clearly understand an invention from a well-written specification and good drawings; but in the examination of applications on appeal before the board of appeals, or the Commissioner, who have not the same familiarity with the special class that the examiner may have, a model is generally found necessary for a clear and full understanding of an invention. When the case goes, as it may, before courts and juries, the necessity is still stronger. I would, therefore, recommend such amendment of this section as will make a model necessary in all cases where the invention can be represented by one. A matter of so great importance should not be left to the discretion of the Commissioner.

By the operation of the final clause in section 33, an assignee of the entire interest in a patent, who may desire to secure its reissue, must secure the signature and oath of the inventor to the application, provided the inventor is living. There seems to be no good reason for this provision, as no new matter can be introduced into a reissue, and the inventor having parted with his entire interest, there is no more reason for his signing the application than there would be in having any other disinterested person do so. Experience shows, however, that inventors very often take advantage of this clause to exact large sums of money from assignees for the simple act of signing their names to applications. The only end this clause seems to serve is to give assignors the right of extortion. The section should be amended so as to allow an assignee of the entire interest in a patent to apply for a reissue in his own name.

Section 35 should be amended to correspond with the suggestions made on section 23.

Section 36 provides for the recording in the Patent Office of assignments, yet under very many patents licenses to use the same and to manufacture under them are given all over the country, in nearly every city and town, and yet no record of the same is made in the Patent Office. It is impossible for the Office

to give to an inquirer such an abstract of title as will enable him to determine whether or not the patent is encumbered. This section can be amended so as to require licenses and shop-rights to be put in writing, and recorded the same as assignments.

It is not unusual for two parties to join in an application and obtain a patent as joint inventors, when, in fact, one makes the invention and the other pays the expenses. Of course such a patent is utterly worthless, and, under the present law, cannot be corrected. I would therefore suggest that section 53 be so amended as to make the misjoinder of parties a ground for reissue, when the misjoinder has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention.

Section 71, authorizing the issue of patents for designs, opens the door for a vast amount of deception and fraud upon the public. Patents are granted under this section for mere changes of form, and by being stamped "patented" the public are led to believe that the functions of the thing patented are covered by the monopoly.

As designs relate only to form and figure, I would recommend that this section be so amended as to make designs registerable the same as trade-marks; and that certificates of registration be issued instead of patents; and that holders of certificates of registration be forbidden to use upon the articles covered by such certificates the word "patented," or any other word calculated to lead the public to believe that the article is covered by a mechanical patent.

In my last two annual reports I have called attention to the necessity of a reorganization of the Patent Office. The present organization was adopted when the number of applications for patents was only a few hundred per annum instead of twenty thousand, as at present, and when the value attached to patents was almost nothing compared to that which they now assume.

The inventive genius of our people has largely contributed to the enormous growth in the manufacturing interests of our country during the last twenty-five years. By as careful an inquiry as I have been able to make, without legal authority to obtain exact figures, I am satisfied that fully nine-tenths of all the capital invested in manufacturing in the United States is thus invested because

of the security given to it by patents. Very few men are willing to invest their money in manufacturing, if, when they have established a market, and rendered their articles of manufacture popular, other establishments may be built up in their immediate vicinity, and compete with them in the market, and reap the advantages of their pioneer work. Consequently, manufacturers have sought patents to cover the principal articles they manufacture, thus securing a specialty that will be certain to give them a remunerative market. This fact has given to patents a largely-increased importance, and added much to their commercial value.

It is the pretense of our patent system to give an inventor an instrument that shall, for a limited time, afford him full protection for all he has invented, and yet not permit him to monopolize the rights of the public, or of other inventors. A large majority of applications for patents, embracing important and valuable improvements, are accompanied by descriptions, and by claims much broader than the inventions—so broad as to invade patents granted to others, and often to cover what is already well known, and has long been in public use.

It is the duty of the Patent Office, under the law, to ascertain just what is new and useful in the applicant's invention, and then to limit his description and claims to that of which he is really the first and meritorious inventor. A patent thus limited is the most valuable to the inventor, the least restrictive upon manufacturing and trade, and freest from annoyance to the public.

In the infancy of our patent system the Commissioner was allowed two or three assistants, who were called Examiners. The custom was for the Examiners to make a careful, expert examination as to the question of novelty, and to suggest wherein the description was erroneous, and the claim too broad or too narrow, and to report such action to the Commissioner, who reviewed their work, and granted patents or rejected the application, as seemed just and proper.

As the work of the Office increased, so that the number of Examiners extended from two or three to over seventy, the review of the work of the Examiners, by the Commissioner, became an impossibility; hence the Office, by the very necessities of its situation, has

fallen into the practice of sending an application to an Examiner in charge of a class, who examines and determines upon the question as to whether a patent should issue or not, and either rejects or passes for issue without supervision. The result is that very many applications are hastily and carelessly examined; very many patents are issued every year for subject-matter not patentable; and applications are rejected upon which patents should be granted. Many patents are granted upon applications that contain valuable inventions, yet the descriptions have been so faulty, and the claims so carelessly drawn, as either to make the patent entirely worthless, or to make it exceedingly annoying and damaging to the public, from the fact that it is permitted to cover not only the applicant's invention, but very much that is well known and open to free use by the public.

It is well known that complaints from many sections of the country, against our whole patent system, arise almost exclusively from patents that are improperly granted, because of the want of proper supervision in their examination; and with so many persons examining and passing applications for issue, it is an impossibility to establish anything like a uniformity of practice in the Office, or to get any such supervision as will attain what the law is intended to secure—that is, the rights of the inventor without infringing upon the rights of the public.

The only remedy for the evil here pointed out is for such a reorganization of the Office as will secure supervision of the work of examining. The Examiner's duty should be to examine and report to some superior officer, who should review his work and determine the question of patentability. The very fact that one's work is to be reviewed, and approved or disapproved, will secure thoroughness, when the absence of such supervision engenders haste and carelessness.

The number of applications for patents averages seventy a day, and the number of patents issued something over forty a day. From this amount of work, it will readily be seen that the Commissioner cannot, as was originally intended, give personal attention to more than a very few applications for patents.

The plan which I have suggested heretofore, and which I again earnestly recommend, is the grouping of the one hundred and forty-

five classes in the Patent Office into nine divisions, each division to be presided over by a competent man to review the work of those under him.

I am thoroughly satisfied that such an organization would relieve the country of a large number of very annoying patents which should never be granted, and will secure to real inventors the products of their brain-work with much greater certainty than is now done.

The reorganization suggested here, of course, would somewhat increase the expenses of the Patent Office, and in order to insure that the Office shall be self-sustaining it may become necessary to increase its revenues. This I think can be done without serious hardship to inventors, and with great advantage to the progress of invention and the convenience of the public.

Experience has shown that a very considerable proportion of the patents granted are for inventions that really prove to be worthless in themselves. They need additional inventions and new adaptations before they possess any practical merit to commend them to public use; consequently they lie dormant until some new inventor, possessing more practical knowledge of the subject-matter, makes the additional invention necessary, and the former invention becomes an element in the new invention, which is introduced into public use and becomes popular. When it is thus introduced, shrewd speculators frequently buy the old patent for a mere trifle and levy tribute upon the manufacturers and users of a new article, in which the old invention is a mere sub-element. Thus we find that inventions, useless in themselves, are often hindrances in the way of the development of practical machinery; either preventing such development, when it is known that they exist, or levying such tribute upon it, when reconstructed without such knowledge, as to practically drive the useful machinery out of the market.

I am convinced that it would be to the interest of inventors and the public, that holders of patents should, at the expiration of six or seven years from the date of their patents, be required to pay into the Patent Office a sum of, say, twenty dollars, otherwise their patents to become void. This would probably sweep out of existence fully twenty-five per cent.

or, perhaps, a larger proportion of all the patents granted, and would add sufficiently to the revenues of the Office to defray its necessarily increasing expenses. This tax would not be onerous upon holders of patents possessing, in themselves, any real merit, and would be beneficial in exterminating such as are without merit and stand in the way of substantial and practical improvements.

The expense, delay, and uncertainty of patent litigation in the courts go far to diminish the value of patents, and to discourage meritorious inventors. Experience has proven that when an inventor, by the exercise of his genius and skill, has developed a really valuable invention, it has usually taken nearly or quite one-half of the lifetime of his patent to demonstrate its importance and value to the public, and create a demand for it. About the time such demand has been established, and a profitable market fairly opened, infringers have generally appeared and piratically seized upon the fruits of his genius and toil. It is true, the statute provides, nominally, a remedy against infringers by actions and suits in the United States circuit courts. He finds, however, most of the courts so thronged with business, and such a reluctance upon the part of most of the judges to touch patent cases, that he has presented to him but faint hope of securing a final judgment before the patent shall have expired. The delay in reaching final decisions adds so greatly to the expenses of litigation that most inventors are compelled to abandon all hope of ever enjoying the exclusive use of the inventions which the Government has attempted to guarantee to them.

Very many meritorious inventions are applicable only in a small way, and adapted to light business, and will not warrant the expense of litigation in the circuit courts, however certain the result of such litigation might be. The dishonest are therefore encouraged to continue their piracy, and honest inventors are discouraged in their efforts to develop and perfect patentable improvements.

The judges for these courts are selected because of their legal learning and high judicial qualities, but to satisfactorily try cases growing out of the infringement of patents there must be added to these very essential qualifications a thorough knowledge of the applied sciences and the practical arts, a clear, expert

knowledge of mechanical likes and unlikes, of mechanical equivalents and non-equivalents, to which many of our very best and most able jurists lay no claim. In fact our ablest judges are the most pronounced in their opinion that our present judicial tribunals are not adapted to the wants of patent litigation.

To remedy these evils, and to provide a comparatively inexpensive means of trying the validity of patents and of speedily enforcing the rights secured by them, I respectfully recommend that there be established at Washington a court exclusively for the trial of patent cases, to be composed of men eminent for their legal and judicial talents, and also distinguished for their expert knowledge of the subjects presented in the trial of causes growing out of patents. This court should be easy of access, always in session, and the pleadings simple and direct. Its findings of facts should be final; its rulings on law points might be reviewed, upon proper application, by the United States Supreme Court.

Another reason for the establishment of a single court for the trial of patent causes is found in the fact that the same patent is often infringed in many different sections of the country, making it necessary, under the present system, for the owner of a patent to commence separate suits in all the different circuits where the patent is infringed, and be at the expense of taking the same testimony in all these different courts to sustain the validity of his patent, thus increasing his expenses and multiplying the labor of the courts.

Such a court could easily try all the patent cases arising in the country, and would enable the owners of patents to obtain final judgments in a less number of months than it now takes years, and at a mere fraction of the present expense. The value of meritorious patents would be greatly enhanced, and inventors would receive more substantial remuneration and encouragement.

The Patent Office Official Gazette is increasing in popularity from week to week. The promptness with which it furnishes the claims and abstracts of the drawings of patents issued, and also the decisions of the Commissioner of Patents in appeal cases, and of the United States Supreme Court and circuit courts, in the trial of patent causes, proves of very great aid to the examining corps, and also to inventors and manufacturers and all others interested in matters pertaining to this Office.

There is a very large demand for the condensed illustrations of patents issued between the first day of July, 1869, when the old form of reports ceased, and the first day of January, 1872, when the Gazette was established. It is very desirable that this gap should be bridged over by the publication of the drawings, substantially in the same form as they are now published in the Official Gazette. The claims of the patents for that time have been printed and the stereotyped plates are still preserved; hence, the expense of this work need not be very large.

In the examination of applications for patents in the Office and in answering inquiries as to particular patents that have been issued, it is necessary constantly to refer back to the Office records and the Patent-Office reports, from the time of their earliest publication. There being no general index of the patents issued, this becomes a work of very great labor, and is a fruitful source of mistakes and blunders.

Mechanics, manufacturers, inventors, and attorneys outside of the Office, who constantly have occasion to ascertain what patents, when, and to whom, have been issued in the different departments of art, very few of whom have complete sets of the Patent-Office reports, and are now unable to complete such sets, find it impossible to get the information they desire except by addressing the Office. In view of these necessities, I have caused a general subject-matter index of all the patents issued since the establishment of the Office, and a general name-index of patentees, to be compiled, and they are now ready for publication. When published they will be in very great demand among those interested in patents, and will be of great value to the Office, saving much labor and avoiding many disagreeable and harassing blunders. The subject-matter index, complete, can be published in two volumes. The name-index will require two additional volumes.

I would respectfully recommend that these indexes be published as soon as possible, and that the Commissioner of Patents be authorized to sell the same at a price that will cover the cost of their production.

During the late International Exposition there was called at Vienna an international congress for the purpose of considering the

subject of patents, with a view to such modifications of the patent laws of the various countries having such laws as would secure the rights of the inventors of one country against the piracy of their inventions in other countries, and to make the facilities of obtaining patents in one country by the citizens of another reciprocal among the nations.

The President commissioned Hon. J. M. Thacher, Assistant Commissioner of Patents, to represent the United States in that congress. When Mr. Thacher reached Vienna, however, the congress proved to be a mere unofficial convention of prominent citizens of the various European governments and a few from the United States. For this reason, I am informed, Mr. Thacher did not present his credentials, but, by invitation, participated to some extent in the convention as a citizen of the United States.

The discussions of the convention were of the greatest importance, and clearly developed the fact that the American patent system is rapidly becoming more and more popular in Europe; and strenuous efforts are being made by prominent persons in nearly all the European governments to secure such legislation at home as will assimilate their patent laws to ours.

Mr. Thacher fully and clearly presented the American system before the convention, pointing out its peculiarities and its results; and the influence of his mission is evidently destined to do very much toward accomplishing the aim and desire of American inventors and manufacturers. As he has, however, made a full report to the Secretary of State, it is not proper, perhaps, that I should further enlarge upon the matter in this report.

The business of the Office has been conducted with proper dispatch and the best care that can be hoped for with our present organization, and all the classes and divisions are well up to date with the Office work. I take great pleasure in speaking in the highest terms of the capability and efficiency of nearly all the officers, clerks, and other employes of the Bureau. A large amount of over-work has been done during the year without complaint or demand for extra pay.

Respectfully submitted:

M. D. LEGGETT,

Commissioner of Patents.

ALPHABETICAL LIST

OF

PATENTEES FOR THE YEAR 1873.

[Claims and drawings of Designs, Extensions, and Disclaimers are not carried into the Monthly Volumes or the Gazette.]
[Trade-marks are in a separate index.]

Number.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Specification.	Drawing.	Volume.	Page.
144, 724	Abbiati, E., New York, N. Y. Track-clearer	Nov. 18, 1873	479	163	4	540
145, 323	Abbott, A. A., Chicago, Ill. Sleigh	Dec. 9, 1873	263	88	4	619
138, 309	Abbott, E. L., and S. T. Gibson, South Bend, Indiana. Table-leaf support	Apr. 29, 1873	975	306	3	478
	Abbott, J. (See Hammond, Adler & Abbott.)					
138, 222	Abbott, J., Canton, Ohio. Iron front for stone piers	Apr. 29, 1873	889	281	3	471
142, 547	Abbott, J. D., assignor to A. W. Smith, Manchester, N. H. Sectional horseshoe	Sept. 9, 1873	211	69	4	271
142, 976	Abbott, J. K., Cincinnati, Ohio. Sectional steam-boiler	Sept. 23, 1873	585	199	4	322
135, 056	Abbott, J. P., Cleveland, Ohio. Eaves-trough hanger	Jan. 21, 1873	526	170	3	77
139, 848	Abbott, N. B., Brooklyn, N. Y. Composition pavement	June 17, 1873	387	121	3	663
134, 964	Abbott, T., Blackburn, Great Britain. Machine for sizing yarn	Jan. 21, 1873	139	141	3	71
141, 098	Abeel, F. H., New York, N. Y. Dumping-truck	July 22, 1873	696	234	4	93
	Abel, G. (See Pedder & Abel.)					
138, 978	Abell, J., Woodbridge, Canada. Adjustable chute for turbine water-wheels	May 20, 1873	467	147	3	559
138, 979	Abell, J., Woodbridge, and A. D. Cole, Toronto, Canada. Water-wheel	May 20, 1873	468	147	3	559
132, 832	Abraham, G. F., assignor to self and D. Claridge, Baltimore, Md. Marine-safe	May 13, 1873	336	104	3	535
	Abrahams, I. B. (See Lyons & Abrahams.)					
144, 300	Abrams, J. R., Greenville, Ala. Grave-covering	Nov. 4, 1873	106	36	4	487
139, 751	Absterdam, J., New York, N. Y. Manufacture of steel	June 10, 1873	295	.....	3	648
141, 908	Ackerman, W., Flint, Mich. Boot-heel screw	Aug. 19, 1873	468	153	4	190
135, 057	Ackerman, C. W., Pekin, Ill. Apparatus for filtering and rectifying spirits	Jan. 21, 1873	526	170	3	77
135, 305	Ackley, J. S., and D. S. Ranney, Modus, Conn. Tobacco-topper	Jan. 28, 1873	756	244	3	108
143, 603	Ackroyd, J. E., Chester, Pa. Apparatus for cleansing dyed wool, &c.	Oct. 14, 1873	191	64	4	404
	Ackroyd, R. (See Cockcroft & Ackroyd.)					
135, 616	Ackroyd, R., Philadelphia, and W. Cockcroft, Chester, Pa. Drawing mechanism for spinning-frames	Feb. 11, 1873	221	69	3	157
	Acme Mower and Reaper Company. (See Yost, G. W. N., assignor.)					
137, 120	Adair, I. V., Romulus, N. Y. Post-driver	Mar. 25, 1873	701	232	3	331
142, 428	Adametz, A., New York, N. Y. Process for preserving beer	Sept. 2, 1873	93	31	4	250
135, 306	Adams, A., Sandwich, Ill. Corn-sheller	Jan. 28, 1873	756	244	3	108
139, 752	Same.....Draft-hook for cultivators	June 10, 1873	297	91	3	648
144, 302	Adams, A. C., Cambridge, Mass. Stocking-supporter	Nov. 4, 1873	107	36	4	487
144, 303	Same.....same	Nov. 4, 1873	108	36	4	487
141, 193	Adams, A. M., Sacramento, Cal. Combined latch and lock	July 29, 1873	797	251	4	109
135, 744	Adams, C. W., Wheeling, W. Va. Tug-buckle for harness	Feb. 11, 1873	330	106	3	165
	Adams, D. (See Hearne & Adams.)					
	Adams, F., Somerville, Mass. Copper cylinder	Aug. 2, 1873	.....	.....	4	85
	Adams, F. F. (See Lovell, M. N., assignor.)					
	Adams, H. (See Deitzler, M., assignor.)					
144, 179	Adams, H. A., Sandwich, Ill. Harvester	Nov. 4, 1873	1	1	4	478
5, 464	Adams, H. P., Cleveland, Ohio. Butter-package	June 24, 1873	838	266	3	708
136, 402	Same.....Splice for railway-rails	Mar. 4, 1873	44	16	3	249
	Adams, H. R. (See Adams, J. Q. and H. R.)					
136, 634	Adams, L., jr., Boston, Mass. Nickel-plating	Mar. 11, 1873	265	.....	3	276
138, 833	Adams, J., Pittsburgh, Pa. Lid for jelly-glasses	May 13, 1873	337	104	3	535
139, 349	Adams, J., Newark, Ohio, assignor to self and O. H. Frenier, Granville, Ohio. Wash-boiler	May 27, 1873	811	259	3	594
142, 883	Adams, J., Gloucester, N. J. Life-boat	Sept. 16, 1873	499	170	4	305
144, 301	Adams, J. F., Lexington, Ky. Hemp-brake	Nov. 4, 1873	107	36	4	487
	Adams, J. M., Canton, Mass. Weeding-hoe	Oct. 18, 1873	.....	.....	4	401
140, 231	Adams, J. P., Ipswich, Mass. Hair-spring stud for watches	June 24, 1873	735	232	3	700
143, 111	Adams, J. Q. and H. R., Marseilles, Ill. Wind-mill	Sept. 23, 1873	696	239	4	331
138, 834	Adams, J. R., Sacramento, Cal. Railway-switch	May 13, 1873	338	104	3	535
143, 052	Adams, J. R., Oakland, Cal. Flexible vertically-extensible attachment for boats	Sept. 23, 1873	652	223	4	327
	Adams, J. S., et al. (See McGee, S., assignor.)					
144, 304	Adams, J. W., Rockville, Ind. Portable stall for horses	Nov. 4, 1873	108	37	4	487
144, 013	Adams, L., Mattoon, Ill. Railway-car brake	Oct. 28, 1873	598	198	4	457
145, 324	Adams, L., Mason City, Ill. Bee-hive	Dec. 9, 1873	264	88	4	619
145, 268	Adams, N., Altoona, Pa. Hand-truck	Dec. 9, 1873	213	73	4	615
141, 909	Adams, O., Black Hawk, Colo. Reversible rotary steam-engine	Aug. 19, 1873	469	153	4	190
	Adams, P. J. (See Wate, S. N., jr., assignor.)					
135, 395	Adams, R., East Enterprise, Ind. Fire-kindler	Feb. 4, 1873	1	1	3	128
141, 305	Adams, S. M., assignor of one-third interest to J. Johnston, New York, N. Y. Process of ornamenting glass	July 29, 1873	963	.....	4	118
141, 686	Adams, T., Jersey City, N. J. Feed-bag for horses	Aug. 12, 1873	259	83	4	164
139, 101	Adams, W. W., Rockford, Ill. Bureau and ironing-table combined	May 20, 1873	577	181	3	568
140, 396	Adamson, J. H., Auburn, Australia, assignor to W. and M. S. Taylor, Alameda, Cal. Combined harvester and thrasher	July 1, 1873	50	17, 18	4	12
145, 980	Adamson, J. H., San Francisco, Cal. Rotary-winnower	Dec. 30, 1873	874	283	4	702
	Adamson, W. (See Simonin, C. F. A., assignor.)					
5, 610	Adamson, W., and C. F. A. Simonin, Philadelphia, Pa., assignors to W. Adamson. Treating offal, flesh, entrails, &c., for preservation, manure, &c. (Reissue) ..	Oct. 21, 1873	516	.....	4	440
5, 611	Same.....Drying offal, entrails, flesh, &c., for preservation, manure, &c. (Reissue) ..	Oct. 21, 1873	517	.....	4	440
5, 612	Same.....Manure from offal, flesh, &c. (Reissue) ..	Oct. 21, 1873	517	.....	4	440

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
135, 745	Adderley, J. W. (<i>See</i> Warren & Adderley.)					
142, 756	Addy, C. J., assignor of one-half interest to J. R. Folsom, Boston, Mass. Heel-trimming machine.	Feb. 11, 1873	331	106	3	165
	Addy, C. J., Boston, Mass. Machine for trimming and burnishing the edges of boots and shoes.	Sept. 16, 1873	399	135	4	296
145, 607	Adler, J. (<i>See</i> Meyers, L., assignor.)					
	Adler, L., Baltimore, Md. Manufacture of bitartrate of potassa.	Dec. 16, 1873	516	.....	4	651
139, 645	Adler, M. (<i>See</i> Hammond, Adler & Abbott.)					
138, 111	Adney, J. D., Chicago, Ill. Coffee-steepers.	June 10, 1873	191	63	3	640
140, 450	Adriaans, J. H., Washington, D. C. Dumping-wagon.	Apr. 22, 1873	768	244	3	453
145, 826	Affleck, A. H., Marshallville, Ga. Piano tuning-key.	July 1, 1873	88	31	4	15
142, 071	Agar, H., Batavia, N. Y. Whiffletree.	Dec. 23, 1873	713	234	4	679
	Agresta, A. P., New York, and A. Meucci, Clifton, N. Y. Sauce for food.	Aug. 26, 1873	629	.....	4	213
137, 400	Ahl, D., Newville, Pa. Surgical instrument. (Extension.)	May 17, 1873	.....	.....	3	527
139, 526	Ahrend, H., Newark, N. J. Guard for door-knobs.	Apr. 1, 1873	107	35	3	365
142, 757	Same. Bag-lock.	June 3, 1873	70	24	3	614
	Ahrens, B., and D. Gerhard, Reading, Pa. Car-axle.	Sept. 16, 1873	400	135	4	296
	Aiken, A. J. (<i>See</i> Jordan, W. A., assignor.)					
	Same. (<i>See</i> McClintock & Cumberland, assignors) (Reissue.)					
141, 977	Aiken, F. H., Franklin, N. H. Machine for pointing wire.	Aug. 19, 1873	519	172	4	194
143, 486	Same. same.	Oct. 7, 1873	75	25	4	387
137, 279	Aiken, H., Philadelphia, Pa. Alloy for producing ornamental coatings on metals.	Apr. 1, 1873	1	.....	3	357
139, 286	Aiken, H. V., Gibsonburgh, Pa. Lubricator.	May 27, 1873	765	242	3	590
142, 884	Aiken, J. B., Franklin, N. H. Portfolio-holder.	Sept. 16, 1873	499	171	4	305
5, 430	Aiken, J. W., Philadelphia, Pa., and J. H. Stone, Hamilton, Canada, assignors by mesne assignments to F. Crane, Bloomfield, N. J. Fur-set box. (Reissue.)	June 3, 1873	176	58	3	623
144, 491	Ainée, N. U., New York, N. Y. Stilt.	Nov. 11, 1873	277	93	4	512
	Ainsworth, D. H. (<i>See</i> McClure & Ainsworth.)					
143, 604	Ainsworth, E., Wilmington, Del. Belt-clamp.	Oct. 14, 1873	192	65	4	405
143, 112	Ainsworth, L. E., East Bolton, Canada. Fire-escape.	Sept. 23, 1873	698	239	4	331
136, 635	Aird, A. and J., Troy, N. Y. Rotating-hooks for sewing-machines.	Mar. 11, 1873	266	89	3	276
	Aird, J. (<i>See</i> Aird, A. and J.)					
145, 269	Akeroyd, A., Manchester, N. H. Designers' paper.	Dec. 9, 1873	213	73	4	615
137, 818	Akers, W. R., and J. E. Johnson, Malcolm, Iowa. Heating stove.	Apr. 15, 1873	500	156	3	422
136, 198	Aland, S., Rome, N. Y. Journal-box.	Feb. 25, 1873	752	243	3	224
136, 199	Albee, J., Chelsea, Mass. Water-closet.	Feb. 25, 1873	753	243	3	224
139, 102	Alberger, J. L., Buffalo, N. Y. Steam-condenser.	May 20, 1873	578	181	3	568
140, 232	Same. same.	June 24, 1873	735	232	3	700
139, 990	Albert, C. F., Philadelphia, Pa. Needle-setter and threader for sewing-machines.	June 17, 1873	504	160	3	673
	Albert Field Tack Company. (<i>See</i> Lowe, J., assignor.)					
	Same. (<i>See</i> Starks, G., assignor.)					
139, 849	Albertson, J. M., New London, Conn. Baling-press.	June 17, 1873	387	121	3	663
145, 827	Albin, J. P., Cincinnati, Ohio. Apparatus for bending coffin-sides.	Dec. 23, 1873	714	235	4	679
5, 261	Albrecht, H., Philadelphia, Pa., assignor by mesne assignments to American Machine Company. Clothes-wringer. (Reissue.)	Jan. 28, 1873	848	273	3	115
	Albrecht, H. (<i>See</i> Corbin & Albrecht.)					
139, 850	Albrecht, O., Philadelphia, Pa. Car-coupling.	June 17, 1873	388	121	3	663
137, 872	Albright, A. (<i>See</i> Holmes, K. W., assignor) (Reissue.)					
137, 873	Same. Manufacture of rubber-coated harness-trimmings.	Apr. 15, 1873	543	169	3	425
141, 532	Albro, G., Columbus, Pa. Fence.	Apr. 15, 1873	544	170	3	425
137, 121	Alcorn, W. H., West Hoboken, N. J. Child's swing.	Aug. 5, 1873	105	32	4	143
139, 699	Alcott, T. J., Mount Holly, N. J. Water-wheel.	Mar. 25, 1873	701	233	3	331
5, 648	Alden, C., Newburgh, N. Y. Process and apparatus for preserving animal and vegetable substances. (Reissue.)	June 10, 1873	246	77, 78	3	645
138, 356	Alden, H. A., Matteawan, N. Y. Billiard-cushion.	Nov. 11, 1873	360	122	4	519
6, 970	Alden, J. B., Worcester, Mass. Carpet. (Design.)	Apr. 29, 1873	1, 013	319	3	481
	Alden, J. M., administrator. (<i>See</i> Alden, M.) (Extension.)	Nov. 4, 1873	.....	.....	4	478
	Alden, M., deceased, by J. M. Alden, administrator, Auburn, N. Y. Cultivator. (Extension.)					
145, 475	Aldrich, E. D., Pittsfield, Mass. Scythe-holder for rag-cutters.	May 10, 1873	.....	.....	3	497
139, 103	Aldrich, W., Dayton, Ohio. Steam-pump.	Dec. 16, 1873	397	131	4	641
	Alexander, C. D., et al. (<i>See</i> Wiley, E., assignor.)	May 20, 1873	579	182	3	568
	Alexander, C. W. (<i>See</i> Russell, A., assignor.)					
136, 354	Alexander, E. H., New York, N. Y. Braider for sewing-machines.	Mar. 4, 1873	1	1	3	245
136, 355	Same. Braiding-attachment for sewing-machines.	Mar. 4, 1873	2	1	3	245
140, 233	Same. Attachment for sewing-machines.	June 24, 1873	737	232	3	730
135, 874	Alexander, F. M., administratrix. (<i>See</i> Alexander, J. B.)					
144, 379	Alexander, J., Gartsberrie, Scotland. Coal-mining machinery.	Feb. 18, 1873	463	149	3	190
	Alexander, J. B., deceased, by F. M. Alexander, administratrix, Washington, D. C. Rail-way-switch.	Nov. 11, 1873	183	63	4	505
140, 336	Alexander, J. S., Pittsburgh, Pa. Tool for working in leather.	July 1, 1873	1	1	4	8
135, 460	Alexander, M. H., Newark, N. J. Wood pavement.	Feb. 4, 1873	65	20	3	132
144, 492	Alexander, T. J., Westerville, Ohio. Wagon-seat.	Nov. 11, 1873	277	94	4	512
137, 280	Algeo, C. C., Pittsburgh, Pa. Sash-holder.	Apr. 1, 1873	1	1	3	357
136, 803	Algeo, R. J., assignor of one-half interest to A. U. Noble and B. Cleenewerck, Kalamazoo, Mich. Staple-socket for hames.	Mar. 18, 1873	417	139	3	297
136, 804	Algeo, R. J., Kalamazoo, Mich. Horse-collar cap.	Mar. 18, 1873	418	139	3	297
137, 335	Alger, S. B., Oswego, N. Y. Friction-clutch.	Apr. 1, 1873	55	16	3	361
145, 270	Allbee, J., Squaw Grove, Ill. Harness-buckle.	Dec. 9, 1873	214	73	4	615
	Allen, A. E., et al. (<i>See</i> Etchell, S. W., assignor.)					
138, 357	Allen, A. H., Boston, Mass. Method of perfecting veneers.	Apr. 29, 1873	1, 014	319	3	481
141, 910	Allen, B. F., Boston, Mass. Fish-hooks.	Aug. 19, 1873	470	154	4	190
142, 659	Allen, C. B., Philadelphia, Pa. Piston.	Sept. 9, 1873	304	101	4	278
	Allen, C. G. (<i>See</i> Lufkin & Allen.)					
136, 403	Allen, C. H., Saint Louis, Mo. Guard for harness-hames.	Mar. 4, 1873	49	16	3	249
143, 950	Same. Axle-box for vehicles.	Oct. 28, 1873	539	179	4	452
136, 805	Allen, C. L., Flat Rock, assignor to J. L. Hood, Grafton, E. Armstrong, and H. C. Hood, Ash, Mich. Clover-separator.	Mar. 18, 1873	418	139	3	297
	Allen, D. B., et al. (<i>See</i> Ross, L. E., assignor.)					
141, 744	Allen, D. C., Concord, N. H. Cutter-head.	Aug. 12, 1873	303	99	4	168
138, 980	Allen, E., assignor to Allen Manufacturing Company, Norwich, Conn. Friction-clutch.	May 20, 1873	468	147	3	559
142, 606	Same. Feed-box for envelope machines.	Sept. 9, 1873	260	85	4	275
142, 607	Same. Inking apparatus for rotary printing-presses. (Extension.)	Sept. 9, 1873	261	86	4	275
	Allen, E. C., Le Roy, N. Y. Corn-planter.	Nov. 8, 1873	.....	.....	4	504

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
138, 779	Allen, E. P., <i>et al.</i> (See McCoy, E., assignor.)					
143, 653	Allen, F. E., Keene, N. H., and S. G. Hall, Winchendon, Mass. Watch-key.....	May 13, 1873	290	89	3	531
	Allen, F. E., and S. G. Hall, Keene, N. H. Watch-key.....	Oct. 14, 1873	233	78	4	408
	Allen, G. (See Wheeler & Wakefield, assignors.)					
	Allen, H. N. (See Tisdale, Putnam & Allen.)					
144, 820	Allen, I. S., M. P. Browen, and C. W. Moulthrop, San Francisco, Cal. Steam-plow.....	Nov. 25, 1873	571	195	4	558
138, 223	Allen, J. A., Philadelphia, Pa. Frame for window-awnings.....	Apr. 29, 1873	891	281	3	471
141, 617	Allen, J. G., Philadelphia, Pa. Ventilating railroad-cars.....	Aug. 12, 1873	199	63	4	159
139, 991	Allen, J. N., Providence, R. I. Button.....	June 17, 1873	504	160	3	673
144, 942	Same..... Stop-nozzle for hose-pipes.....	Nov. 25, 1873	672	228	4	567
139, 350	Allen, L. H., Farmington, N. H. Cutter for sewing-machines.....	May 27, 1873	812	259	3	594
	Allen Manufacturing Company. (See Allen, E., assignor.)					
144, 647	Allen, N. I., and E. S. Stimpson, Milford, Mass. Loom-temple.....	Nov. 18, 1873	421	141	4	535
	Allen, N. W. (See Newcomb, W., assignor.)					
139, 226	Allen, R. N., Pittsford, Vt. Railway car-axle.....	May 27, 1873	707	223	3	586
140, 568	Same..... Railway-car journal-box.....	July 8, 1873	207	69	4	36
137, 163	Allen, R. T. P., Farmdale, Ky. Rotary valve and variable cut-off.....	Mar. 25, 1873	735	244	3	334
142, 660	Same..... Steam-engine.....	Sept. 9, 1873	305	101	4	278
	Allen, W. (See Stewart, C., assignor.)					
144, 725	Allen, W., Worcester, Mass. Lawn-mower.....	Nov. 18, 1873	481	163	4	540
135, 746	Allen, W. B., Winona, Minn. Grain-separator.....	Feb. 11, 1873	332	106	3	166
	Allender, J., deceased, by W. Belcher, administrator, New London, Ct. Wringing-machine.....	Jan. 11, 1873			3	7
5, 255	Allenwood, J. M., Timbuctoo, Cal., assignor to R. R. and J. Craig. Ore-washing apparatus for hydraulic mining.....	Jan. 28, 1873	840	271	3	115
139, 700	Allerton, G. W., and Z. M. Powers, Robinson, Ill. Presser-foot for sewing-machines.....	June 10, 1873	248	78	3	645
	Alles, H. (See Haering & Alles.)					
139, 753	Alley, J. P. (See Blackledge, W. G., assignor.)					
140, 666	Allgaier, J., Philadelphia, Pa. Coach or carriage.....	June 10, 1873	297	92	3	648
144, 881	Same.....	July 8, 1873	289	98	4	43
135, 461	Allin, J., Philadelphia, Pa. Testing-plug.....	Nov. 25, 1873	625	212	4	563
	Alling, D. S., assignor of one-half interest to P. C. Lander, Albany, N. Y. Sewing-machine.....	Feb. 4, 1873	65	20	3	132
	Allis, E. P., & Co. (See Clarke, W. A., assignor.)					
137, 587	Allis, H. (See Haering, H., assignor.)					
	Allis, Y. V., New York, N. Y. Railway-rail joint.....	Apr. 8, 1873	286	88	3	391
137, 646	Allison, J. F. (See Poe, J. B., assignor.)					
138, 358	Allison, J. M., Salina, Pa. Nut-lock.....	Apr. 8, 1873	334	103	3	395
146, 039	Allison, J. M., New Albany, Ind. Composition for covering steam-boilers.....	Apr. 29, 1873	1,015		3	481
137, 045	Allison, O. W., assignor of one-half interest to R. Dempster, Buffalo, N. Y. Steam-boiler.....	Dec. 30, 1873	921	298	4	706
	Allison, O. W., and P. Homelius, assignors to J. H. Small, Buffalo, N. Y. Apparatus for cleaning horses.....	Mar. 25, 1873	631	209	3	326
145, 775	Allison, R., Port Carbon, Pa. Hydraulic feed for revolving rock-drill.....	Dec. 23, 1873	674	220	4	676
142, 548	Alloways, J., Decatur, Ill. Cutter-head for molding-machines.....	Sept. 9, 1873	212	69	4	271
134, 831	Allstatter, R., assignor to Long & Allstatter, Hamilton, Ohio. Heel for knives for reapers and mowers.....	Jan. 14, 1873	315	100	3	45
140, 337	Allt, E., New York, N. Y. Compression-cock.....	July 1, 1873	2	1	4	8
	Allyn, J. H. (See Williamson & Allyn.)					
141, 978	Almond, T. R., Fitchburgh, Mass. Chuck.....	Aug. 19, 1873	520	172	4	194
141, 745	Almy, G. F., Delphos, assignor to self and H. M. Clarke, Toledo, Ohio. Hollow auger.....	Aug. 12, 1873	304	99	4	168
141, 979	Alter, W. W., Saint Louis, Mo. Railway-rail.....	Aug. 19, 1873	521	172	4	194
	Althof, Bergman, & Co. (See Browne, A. W., assignor.)					
139, 287	Althouse, J. A., New Harmony, Ind. Journal-box.....	May 27, 1873	766	243	3	590
141, 847	Alvord, C., Westford, Wis. Firkin.....	Aug. 19, 1873	407	133	4	186
	Amberg, W. (See Borchardt, J. M., assignor.)					
5, 412	Ambrose, J. E., assignor by mesne assignment to S. T. Ambrose, Colorado Springs, Col., and E. Muller, Meriden, Conn. Lamp.....	May 20, 1873	694	218	3	570
138, 112	Ambrose, S. T., <i>et al.</i> (See Ambrose, J. E., assignor.).....					
	Ambrun, J., and E. Olfermann, Leavenworth, Kans. Door-latch handle.....	Apr. 22, 1873	769	244	3	453
	American Basket Company. (See Park, J. K., assignor.).....					
	American Button-Hole Overseaming and Sewing-Machine Company. (See Rehfus, G., assignor.)					
	Same..... (Design.)					
	Same..... (Reissue.)					
	American Cable Screw-Wire Company. (See Goddy, L., assignor.)					
	American Clutch Company. (See Bates, F. G., assignor.)					
	American Coal-Barge Company. (See Wright, W. A., assignor.)					
	American District Telegraph Company. (See Sawyer, W. H., assignor.)					
	American Duplex Ticket Company. (See Jebb & Brush, assignors.)					
	American Enamel Decorating Company. (See Hoggson, S. J., assignor.)					
	American Machine Company. (See Albrecht, A., assignor.).....					
	American Metalline Company. (See Gwynn, S., assignor.)					
	American Steam and Water Recording Company. (See Steele, F., assignor.)					
	American Stop-Motion Company. (See Edson, W., assignor.)					
134, 504	Ames, A., Natchez, Miss. Propelling canal-boats.....	Jan. 7, 1873	1	1	3	7
143, 397	Ames, C. L., <i>et al.</i> (See Moody, W. F., assignor.)					
139, 351	Ames, C. L., and A. H. Frost, Chicago, Ill. Spring bed-bottom.....	Oct. 7, 1873	1	1	4	381
145, 380	Ames, C. W., New York, N. Y. Printer's quoin.....	May 27, 1873	813	260	3	594
	Same..... Perforating-rule for printers.....	Dec. 9, 1873	305	103	4	622
	Ames, G. (See Stuart, L. W., assignor.)					
139, 227	Ames, G., Rochester, N. Y. Apparatus to prevent rapping noise in machinery.....	May 27, 1873	707	223	3	586
	Ames, I. (See Hunter, D. J., assignor.)					
	Ames, J. (See Peartree, P., assignor.)					
142, 137	Ames, J., jr., Lansingburgh, N. Y. Machine for driving brush-handles.....	Aug. 26, 1873	685	225	4	217
145, 546	Same..... Machine for shaping brush-woods.....	Dec. 16, 1873	469	153	4	647
140, 234	Ames, J. G. and P. A., Baltimore, Md. Clothes-line fastener.....	June 24, 1873	738	233	3	700
	Ames, P. A. (See Ames, J. G. and P. A.)					
137, 336	Ames, T. G., Kosse, Tex. Ant-trap.....	Apr. 1, 1873	56	17	3	361
134, 623	Amidon, C. H., Miller's Falls, Mass. Baby-carriage.....	Jan. 7, 1873	114	37	3	16
140, 451	Same..... Drill and bit-stock.....	July 1, 1873	89	31	4	15
145, 828	Amish, W. C., Hainesport, N. J. Molding apparatus.....	Dec. 23, 1873	715	235	4	679
138, 465	Ammidoun, M. M., West Roxbury, Mass. Boiler-flue scraper.....	May 6, 1873	1	1	3	497
	Amory, J., New York, N. Y. Steam-boiler furnace.....	Apr. 19, 1873			3	415
144, 305	Amos, A., Potsdam Junction, N. Y. Horse hay-rake.....	Nov. 4, 1873	109	37	4	487
144, 306	Same..... same.....	Nov. 4, 1873	110	37	4	487

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
142, 364	Amsden, G. M., South Boston, Mass. Mode of attaching journals to feed-rollers.....	Sept. 2, 1873	39	13	4	245
	Amsler, C. (See Rouse, A. M., assignor.)					
141, 099	Anderegg, C., Lawrenceburgh, Ind. Wheel for vehicles	July 22, 1873	697	234	4	93
144, 045	Anders, G. L., Boston, assignor to E. B. Welsh, Cambridge, Mass. Printing-tele- graph	Oct. 28, 1873	621	{ 205 206 }	{ 4 4 }	459
	Anders, R. (See Errani & Anders.)					
143, 113	Andersen, C., Brooklyn, N. Y. Filter.....	Sept. 23, 1873	698	239	4	331
142, 138	Anderson A., Chadwick's Mills, N. Y. Shingle-machine	Aug. 26, 1873	686	226	4	217
143, 654	Anderson, C., Brooklyn, N. Y. Distilling pure alcoholic spirits	Oct. 14, 1873	233	79	4	408
137, 647	Anderson, E. D., Frederick, Md. Shutter-fastening.....	Apr. 8, 1873	335	104	3	396
142, 978	Anderson, H. L., assignor of one-half interest to J. M. Rand, Chicago, Ill. Device for holding wagon-boxes to the bolsters.....	Sept. 23, 1873	587	199	4	322
6, 829	Anderson, J., New York, N. Y. Material for gored skirts	Aug. 26, 1873			4	212
136, 851	Anderson, J., Gouverneur, N. Y. Truss-bridge.....	Mar. 18, 1873	539	178	3	307
139, 491	Anderson, J., Brooklyn, N. Y. Sun-bonnet for horses.....	June 3, 1873	44	14	3	612
141, 618	Anderson, J., assignor of one-half interest to W. J. Calais and W. H. James, Wilmington, N. C. Trussed spring-bolster for railroad-cars	Aug. 12, 1873	200	63	4	159
139, 992	Anderson, J. E., Boiling Springs, Pa. Washing-machine.....	June 17, 1873	505	160	3	673
	Anderson, J. H., et al. (See Slusser, G., assignor.)					
137, 874	Anderson, J. J., Indianapolis, Ind., assignor of two-thirds interest to G. H. Shover and G. W. Miller. Hub for heavy-wheeled vehicles.....	Apr. 15, 1873	545	170	3	425
134, 624	Anderson, J. S., Flintville, Wis. Adjustable picket-fence	Jan. 7, 1873	115	38	3	16
135, 058	Same.....Steam blow-pipe.....	Jan. 21, 1873	527	{ 170 171 }	{ 3 3 }	77
135, 059	Same.....Saw-straightening machine	Jan. 21, 1873	528	171	3	78
137, 164	Same.....Means for propelling boats.....	Mar. 25, 1873	736	245	3	334
139, 527	Same.....Railway-car brake	June 3, 1873	71	24	3	614
137, 588	Anderson, J. W., Portland, Ind. Insect-trap	Apr. 8, 1873	284	89	3	392
139, 528	Anderson, M., Chicago, Ill. Offal-dryer.....	June 3, 1873	72	24	3	615
	Anderson, P. (See Newman & Anderson.)					
142, 549	Anderson, P., Chicago, Ill. Bed-bottom.....	Sept. 9, 1873	213	69	4	271
143, 655	Anderson, S. I., P. Walden, and E. P. More, West Eaton, N. Y. Sash-holder.....	Oct. 14, 1873	234	79	4	408
145, 476	Anderson, T. D., assignor of one-third interest to E. E. McKay, Bardstown, Ky. Straw- cutter	Dec. 16, 1873	397	131	4	641
141, 746	Anderson, V. D., Springfield, Ohio. Steam-generator and apparatus for rendering fats...	Aug. 12, 1873	305	100	4	168
145, 547	Anderson, W. G., Worcester, Mass. Window-screen	Dec. 16, 1873	470	153	4	647
144, 307	Anderton, R. L., New York, N. Y. Sash-molding.....	Nov. 4, 1873	111	37	4	487
	Andrae, M. (See Clark, E. B., assignor.)					
139, 352	Andrae, B., Frankfort-on-the-Main, Germany. Gas-burner.....	May 27, 1873	813	260	3	594
144, 428	Andress, T., Auroraville, Wis. Car-coupling	Nov. 11, 1873	227	76	4	508
145, 080	Andrew, W. H., Sheffield, England. Table-knife	Dec. 2, 1873	41	12	4	589
	Andrews, A. C., et al. (See Hermance, J. F., assignor.)					
141, 848	Andrews, A. F., assignor to A. Edwards and A. F. Andrews, New Haven, Conn. Fer- tilizer	Aug. 19, 1873	407		4	186
142, 977	Andrews, A. F., assignor to the Andrews Manufacturing Company, New Haven, Conn. Treating iron and steel to anneal and toughen them	Sept. 23, 1873	586	199	4	322
	Andrews, E. (See Pelham, I., assignor)					
140, 569	Andrews, E., Welchville, Me. Mechanism for making counters for boots and shoes.....	July 8, 1873	208	69, 70	4	36
141, 306	Andrews, E., Bryan, Ohio, assignor to E. L. Bradley and W. A. Clark, New Haven, Conn. Device for securing corners of wagon bodies and seats	July 29, 1873	903	296	4	118
143, 487	Andrews, E. B., Lancaster, assignor of one-half interest to J. G. Deshler, Columbus, Ohio. Blast-furnace	Oct. 7, 1873	75	26	4	387
	Andrews, F. W. (See Waters, B. F., assignor.)					
143, 398	Andrews, G., Oxford, Me. Leather-skiving machine.....	Oct. 7, 1873	1	1	4	381
143, 605	Andrews, I. C., New York, N. Y. Portable fire-extinguisher.....	Oct. 14, 1873	193	65	4	405
134, 721	Andrews, J., Hardin County, Ohio. Medical compound for horses, &c	Jan. 14, 1873	221		3	38
137, 752	Andrews, J., Cleveland, Ohio. Butter-package	Apr. 15, 1873	441	137	3	417
	Andrews, J. W. (See Wallace & Andrews.)					
	Andrews Manufacturing Company. (See Andrews, A. F., assignor.)					
135, 617	Andrews, M. S., Somerville, assignor to J. W. Tufts, Medford, Mass. Soda apparatus	Feb. 11, 1873	221	69	3	157
144, 180	Andrews, S. W., and L. Godfrey, Greenville, assignors of one-half interest to O. G. Van- derhoof, Knoxville, Tenn. Grain separator and scourer.....	Nov. 4, 1873	2	1	4	478
141, 533	Andrews, T. G., and A. Riviere, Barnesville, Ga. Plow	Aug. 5, 1873	106	32	4	143
137, 165	Andrews, W. D., Brookhaven, N. Y. Safety-attachment to hoisting-machines	Mar. 25, 1873	737	245	3	334
6, 996	Andrews, W. H., assignor to Mallory, Wheeler & Co., New Haven, Conn. Lock case. (Design).....	Nov. 18, 1873			4	531
137, 166	Same.....Reversible knob-latch	Mar. 25, 1873	738	245	3	334
141, 479	Andriot, P. M., Oxford, Ohio. Sawing-machine	Aug. 5, 1873	62	19	4	140
	Angell, N. S., et al. (See Pitrat, M. J., assignor.)					
137, 337	Angle, H. G., Chicago, Ill. Railway-rail	Apr. 1, 1873	56	17	3	361
142, 608	Same.....Machine for dressing wood rails	Sept. 9, 1873	262	86	4	275
134, 580	Annan, C. F., assignor to self and H. S. Merrill, Boston, Mass. Machine for making paper-bags	Jan. 7, 1873	75	24	3	13
140, 867	Annin, J., New York, N. Y. Dial for pressure-gauges.....	July 15, 1873	465	157	4	65
140, 107	Annin, J. B., Rochester, N. Y. Book-stand	June 24, 1873	633	199	3	691
144, 308	Anschutz, A., A. Seidel, and M. Weber, Livingston County, Missouri. Plow	Nov. 4, 1873	111	38	4	487
139, 353	Ansell, A. D., Hartford, Conn., assignor to Lazarus, Moses & Co., New York, N. Y. Eye- glasses	May 27, 1873	814	260	3	595
134, 832	Anshutz, H., Allegheny, Pa. Casting fire-grates	Jan. 14, 1873	316	101	3	45
	Ansley, J. A., et al. (See Stewart, G. W., assignor.)					
142, 187	Ansley, V., and J. W. Weaver, Morrison, Ill. Stalk-cutter.....	Aug. 26, 1873	724	239	4	220
141, 412	Anthon, G. C., New York, N. Y. Sewer gas-trap	Aug. 5, 1873	1	1	4	135
	Anthony, E., and H. T. & Co. (See Anthony, H. T., assignor.)					
138, 359	Same.....(See Barker, E. B., assignor.)					
143, 865	Anthony, H. T., New York, N. Y. Photographic-plate holder.....	Apr. 29, 1873	1,015	319	3	481
	Anthony, H. T., assignor to E. and H. T. Anthony & Co., New York, N. Y. Preparing soluble cotton for the manufacture of collodion	Oct. 21, 1873	447		4	435
	Anthony, J. M. (See Seaver, Southworth & Anthony.)					
137, 819	Anthony, R., and F. A. Leabert, Kingston, Pa. Railway-rail joint.....	Apr. 15, 1873	500	156	3	422
141, 980	Antill, J. T., Smith's Ferry, Pa., and W. J. Sloan, Liverpool Township, Ohio. Nut and bolt fastening	Aug. 19, 1873	522	173	4	195
144, 648	Anyan, B., Fitchville, Ohio. Combined picture frame and exhibiter	Nov. 18, 1873	422	141	4	535
137, 524	Appleby, R., Beverly, N. J. Apparatus for cutting cigar-wrappers.....	Apr. 8, 1873	231	71	3	387
140, 570	Appleton, G. P., Suncook, N. H. Machine for sawing laths	July 8, 1873	211	70	4	37
144, 649	Apthcrp, W. L., Tallahassee, Fla. Hemmer for sewing-machines.....	Nov. 18, 1873	422	141	4	535

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143, 314	Archbold, S., Chester, Pa. Condenser-tube fastening	Sept. 30, 1873	869	298	4	362
	Archer & Pancoast Manufacturing Company. (See Deavs, C., assignor.)					
141, 480	Archer E., Davisville, W. Va. Churn	Aug. 5, 1873	62	20	4	140
	Archer, G. W. (See Archer, R. W. & G. W.)					
138, 600	Archer, R. W., Rochester, N. Y. Piano and other stools	May 6, 1873	115	38	3	507
6, 647	Archer, R. W. and G. W., Rochester, N. Y. Foot-rest for barbers' and dentists' chairs. (Design)	May 13, 1873			3	527
6, 648	Same.....Barbers' and dentists' chairs	May 13, 1873			3	527
	Architectural Iron Company. (See Brand, C. F., assignor.)					
145, 829	Ardrey, R., Philadelphia, Pa. Child's chair	Dec. 23, 1873	716	235	4	680
136, 688	Arey, R., Rock Falls, Ill., assignor to A. M. Phelps and F. Dyer. Hand-planter	Mar. 11, 1873	308	102	3	279
135, 060	Argerbright, D., Tippecanoe, Ohio. Wheel for vehicles	Jan. 21, 1873	529	171	3	78
144, 046	Armbruster, J., Petroleum Centre, Pa. Flue-cleaner for boilers	Oct. 28, 1873	623	206	4	459
145, 081	Armiger, R., Baltimore, Md. Refrigerator	Dec. 2, 1873	41	13	4	589
139, 646	Armitage, T. B., New York, N. Y. Process of reducing wood fiber to pulp	June 10, 1873	191		3	640
142, 550	Same.....Process of disintegrating woody fiber for paper pulp	Sept. 9, 1873	213		4	271
	Armour, J. B. (See Dillon, M., assignor.)					
136, 480	Armour, J. M., Syracuse, N. Y. Knitting-machine	Mar. 4, 1873	109	37	3	254
136, 200	Arms, J. C., Northampton, Mass. Game-board	Feb. 25, 1873	753	243	3	224
141, 194	Arms, J. L., New Orleans, La. Rice-cleaner	July 29, 1873	797	261	4	109
	Armstrong, A. (See Brand, Barrows & Armstrong.)					
145, 713	Armstrong, A. D., Allegheny City, assignor to Armstrong, Fawcett & McKelvy, Pittsburgh, Pa. Dryer for lead	Dec. 23, 1873	619	203	4	671
139, 754	Armstrong, A. S., New Orleans, La. Cotton-bale tie	June 10, 1873	298	92	3	648
6, 801	Armstrong, C. W., Detroit, Mich. Advertising-desk	Aug. 12, 1873			4	159
141, 413	Armstrong, D. A., Sandwich, and S. T. Armstrong, Sycamore, Ill. Sand-papering machine	Aug. 5, 1873	2	1	4	135
	Armstrong, E., et al. (See Allen, C. L., assignor.)					
	Armstrong, E. S. (See Miller & Armstrong.)					
	Armstrong, Fawcett & McKelvy. (See Armstrong, A. D., assignor.)					
	Armstrong, G. (See Armstrong, J. and G.)					
139, 104	Armstrong, H. G., Trenton, N. J. Paper-bag machine	May 20, 1873	580	182	3	568
	Armstrong, J. (See Davis & Armstrong.)					
5, 569	Armstrong, J., Toledo, Ohio. Feed-water heater and filter for steam-boilers .. (Reissue) ..	Sept. 9, 1873	395	132	4	285
141, 747	Armstrong, J., Saint Joseph, and D. Cheney, Brookfield, Mo. Outlet-valve for water-tanks	Aug. 12, 1873	306	100	4	168
142, 365	Armstrong, J., Toledo, Ohio. Mechanical movement	Sept. 2, 1873	39	14	4	245
143, 606	Armstrong, J., San Francisco, Cal. Bottle-corking machine	Oct. 14, 1873	193	65	4	405
137, 281	Armstrong, J. and G., Elmira, Ill. Stalk-cutter	Apr. 1, 1873	2	1	3	357
	Armstrong, J. G. (See Plattenburg, J. W., assignor.)					
136, 123	Armstrong, J. G. and J. S., Reed Township, Ohio. Wagon-seat	Feb. 25, 1873	689	223	3	219
	Armstrong, J. S. (See Armstrong, J. G. and J. S.)					
	Armstrong, S. T. (See Armstrong, D. A. and S. F.)					
136, 689	Armstrong, T., Hamilton, Canada. Hoof-spreader	Mar. 11, 1873	309	102	3	279
140, 868	Armstrong, T., Sandwich, Ill. Invalid-chair	July 15, 1873	466	158	4	65
	Armstrong, W. (See Kelly, W., assignor.)					
141, 414	Arnaud, J. J., assignor to T. E. Riddel, Boston, Mass., said Riddel assignor of one-half interest to J. W. Richardson, Medway, Mass. Toy	Aug. 5, 1873	3	1	4	135
143, 803	Arndt, A. F. R., assignor to self and W. Doeltz, Detroit, Mich. Child's carriage	Oct. 21, 1873	395	131	4	430
145, 271	Arndt, A. F. R., assignor to T. Nourse and N. D. Lapham, Detroit, Mich. Game-board ..	Dec. 9, 1873	214	73	4	615
135, 505	Arnold, A., and H. Merz, Chicago, Ill. Show-case	Feb. 4, 1873	101	32	3	135
139, 851	Arnold, A. A., Clyde, Ohio. Dinner-can	June 17, 1873	389	121	3	663
138, 981	Arnold, B., East Greenwich, R. I. Machine for darning stockings	May 20, 1873	469	147	3	559
138, 982	Same.....same	May 20, 1873	470	148	3	559
136, 895	Arnold, D. J., Brownsville, Nebr. Railway switch	Mar. 18, 1873	493	163	3	303
	Arnold, E. R., Brooklyn, N. Y. Cut-off valve of steam-engines	Nov. 1, 1873			4	452
28, 244	Arnold, G. B., assignor to the Magic Ruffle Company, New York, N. Y. Ruffle. (Disclaimer filed)	Dec. 10, 1873			4	614
145, 082	Arnold, H. H. C., Nicholasville, Ky. Animal-trap	Dec. 2, 1873	42	13	4	589
141, 534	Arnold, H. L., Ottawa, Ill. Yarn take-up and tensor device for knitting machines	Aug. 5, 1873	106	33	4	143
142, 429	Same.....Set-up device for knitting-machines	Sept. 2, 1873	94	31	4	250
140, 338	Arnold, J., Newark, N. J. Trunk-fastener	July 1, 1873	2	1	4	8
139, 228	Arnold, J. P., Philadelphia, Pa. Curtain-cord fastener	May 27, 1873	708	223	3	586
	Arnold, J. R., et al. (See McIntyre, T. K., assignor.)					
138, 836	Arnold, J. W., Boston, Mass. Railway snow-plow	May 13, 1873	339	105	3	535
138, 360	Arnold, S. D., assignor to P. and F. Corbin, New Britain, Conn. Bolt for doors	Apr. 29, 1873	1,016	320	3	481
139, 647	Same.....Flush bolt for doors	June 10, 1873	192	63	3	640
	Arnold, W. F. (See Jennings & Arnold.)					
134, 625	Arnold, W. F., New Britain, Conn. Lifting-jack	Jan. 7, 1873	115	38	3	16
138, 113	Arnold, W. F., Winthrop, Conn. Try-square	Apr. 22, 1873	770	245	3	453
	Arnold, W. H. (See Duncan & Arnold.)					
135, 747	Arnot, A. H., Morristown, Tenn., assignor of one-half interest to T. J. Speck, Rogersville, Tenn. Railway track-lifter	Feb. 11, 1873	332	106	3	166
140, 179	Arnot, H., assignor to self and G. W. Dickey, Barclay, Pa. Boot-jack	June 24, 1873	695	218	3	696
	Arnott, J. P. (See Davis, E., assignor.)					
135, 061	Arthur, W., Newport, Ky. Steam-pump	Jan. 21, 1873	529	171	3	78
136, 298	Asbury, J. N. and L. M., Rockland Mills, Ky. Turbine water-wheel	Feb. 25, 1873	839	271	3	231
	Asbury, L. M. (See Asbury, J. N. and L. M.)					
146, 040	Aschenbrenner, H. M., assignor to self and T. Masac, Havana, Cuba. Sugar manufacture.	Dec. 30, 1873	922	299	4	706
136, 356	Ash, A. D., Swayne County, N. C., assignor of one-half interest to J. Curtis, Knoxville, Tenn. Smut-mill	Mar. 4, 1873	3	1	3	245
5, 537	Ash, J., Sterling, Ill. Tea-kettle spout	Aug. 19, 1873	614	202	4	202
141, 195	Ash, R., Saint Louis, Mo. Spark-arrester	July 29, 1873	799	261	4	109
144, 821	Ash, T., and Z. Walker, Trenton, N. J. Finery-fire for the manufacture of iron	Nov. 25, 1873	572	195	4	558
145, 477	Ashby, G., Decatur, Ill. Device for marking dovetails	Dec. 16, 1873	398	131	4	641
141, 307	Ashcroft, E. H., Boston, Mass. Registering steam-gauge	July 29, 1873	904	296	4	118
144, 493	Same.....Automatic fire-extinguisher	Nov. 11, 1873	278	94	4	512
145, 143	Same.....Non-freezing battery	Dec. 2, 1873	98	32	4	593
137, 753	Ashen, P., Philadelphia, Pa. Sash-weight	Apr. 15, 1873	442	137	3	417
142, 834	Ashford, H., Philadelphia, Pa. Boat-detaching apparatus	Sept. 16, 1873	461	156	4	301
	Ashley, F. (See Ashley, J. T. and F.)					
	Ashley, J. N., et al. (See Pope, F. L., assignor.)					
138, 983	Ashley, J. T., Williamsburgh, N. Y. Paper-feeding machine	May 20, 1873	471	148	3	559
144, 822	Same.....Brooklyn, N. Y. Feeding paper to rotary printing-presses	Nov. 25, 1873	573	{ 195 } { 196 }	{ 4 }	{ 558 }

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143, 740	Ashley, J. T. and F., Brooklyn, N. Y. Paper-feeding machine.....	Oct. 21, 1873	337	113	4	426
	Ashman, L., & Co. (See Robertson, J., assignor.)					
	Ashurst, J. L. (See Blunt, G. G., assignor.)					
6, 385	Ashworth, D., Kenton County, Ky. Lamp.....(Design)...	Feb. 11, 1873	.....	.....	3	156
144, 943	Ashworth, D., Wappinger's Falls, N. Y. Pipe-coupling.....	Nov. 25, 1873	673	228	4	567
139, 755	Ashworth, H., Walsden, England. Spinning-machine.....	June 10, 1873	299	92	3	648
144, 590	Aspinwall, A., Albany, N. Y. Corn-husking machine.....	Nov. 18, 1873	369	125	4	531
145, 478	Assmus, A., assignor of one-half interest to C. Assmus, Chicago, Ill. Magazine fire-arm.	Dec. 16, 1873	399	131	4	641
	Assmus, C. (See Assmus, A., assignor.)					
138, 837	Aston, J., Hythe, England. Breech-loading fire-arm.....	May 13, 1873	340	105	3	535
142, 366	Aston, J. A., and C. C. McMurphy, Leavenworth, Kans. Combined chest-protector and shirt-bosom support.....	Sept. 2, 1873	40	14	4	245
142, 661	Aston, J. B., Pittsburgh, Pa. Device for blackwashing molds.....	Sept. 9, 1873	306	101	4	279
142, 662	Same.....Core-barrel for castings.....	Sept. 9, 1873	307	102	4	279
136, 016	Atherton, G., Sparta Township, Mich. Horse hay-fork.....	Feb. 18, 1873	580	191	3	199
	Athey, J. (See McCarver, Athey & Jennings.)					
	Athol Machine Company. (See Starrett, L. S., assignor.)					
141, 911	Atkins, C. J., Louisiana, Mo. Ferry-bridge.....	Aug. 19, 1873	470	154	4	190
139, 756	Atkins, E. C., Indianapolis, Ind. Saw-handle.....	June 10, 1873	300	93	3	649
	Atkins, G. (See McAmirch & Atkins.)					
136, 017	Atkins, G., Youngstown, Ohio. Reverberatory furnace.....	Feb. 18, 1873	580	191	3	199
142, 322	Atkins, C., assignor of one-half interest to J. B. Swann, Louisville, Ky. Paddle-wheel...	Sept. 2, 1873	1	1	4	242
136, 201	Atkins, J., Augusta, Me. Machine for planing clapboards.....	Feb. 25, 1873	754	243	3	224
140, 235	Same.....Planing-machine.....	June 24, 1873	739	233	3	700
136, 636	Atkins, S. H., Melrose, Mass. Water-proof furze fabric.....	Mar. 11, 1873	267	89	3	276
140, 667	Atkinson, B., Indianapolis, Ind. Car-coupling.....	July 8, 1873	290	98	4	43
	Atkinson, H. (See Landenberger & Atkinson.)					
5, 410	Atkinson, I., Hamilton, Canada. Curing and packing meats.....(Reissue)...	May 13, 1873	463	.....	3	546
134, 965	Same.....same.....	Jan. 21, 1873	140	.....	3	71
135, 683	Atkinson, J., Cameron, Tex. Dumping-platform.....	Feb. 11, 1873	283	89	3	162
144, 181	Atkinson, J., Burlington, N. J. Scroll-saw.....	Nov. 4, 1873	5	2	4	479
	Atkinson, T. O. (See Kuhn & Atkinson.)					
	Same.....same.....(Reissue.)					
142, 188	Atkinson, W., assignor to T. Wood, Philadelphia, Pa. Bobbin-winding machine.....	Aug. 26, 1873	725	240	4	221
135, 748	Atkinson, W., and C. C. Klein, assignors to T. Wood, Philadelphia, Pa. Shuttle-box mechanism for looms.....	Feb. 11, 1873	333	107	3	166
138, 835	Atkinson, W. B., Philadelphia, Pa. Railway-frog.....	May 13, 1873	338	104	3	535
	Atlantic Giant-Powder Company. (See Judson, E., assignor.)					
	Atlantic Giant-Powder Company et al. (See Nobel, A., assignor.)					
	Atlantic Giant-Powder Company. (See Nobel, A., assignor.).....(Reissue.)					
	Atlantic Giant-Powder Company et al. (See Varney, T., assignor.)					
	Atlantic Refining Company. (See Perkins, G. H., assignor.)					
	Atterbury, J. S. (See Atterbury, T. B., assignor.).....(Three cases.)					
	Atterbury, J. S. (See Atterbury, T. B. and J. S.).....(Design.)					
6, 882	Atterbury, J. S. and T. B., Pittsburgh, Pa. Lamp-bowl.....(Design)...	Sept. 16, 1873	.....	.....	4	296
139, 993	Same.....Method of and mold for manufacturing glass-ware.....	June 17, 1873	506	{ 160 161	{ 3	673
145, 548	Same.....Combined lamp-shade and drip-cup.....	Dec. 16, 1873	470	{ 153 154	{ 4	647
	Atterbury, T. B. (See Atterbury, J. S. and T. B.).....(Two cases.)					
	Same.....same.....(Design.)					
	Atterbury, T. B., et al. (See Zellers, T. A., assignor.)					
6, 613	Atterbury, T. B., Pittsburgh, Pa. Glass-ware.....(Design)...	Apr. 29, 1873	.....	.....	3	471
140, 236	Atterbury, T. B., assignor to self and J. S. Atterbury, Pittsburgh, Pa. Molasses-pitcher.	June 24, 1873	739	233	3	700
140, 988	Same.....Lamp.....	July 22, 1873	599	203	4	85
143, 951	Same.....Salt and pepper dredge combined.....	Oct. 28, 1873	539	179	4	452
6, 948	Atterbury, T. B. and J. S., Pittsburgh, Pa. Lamp-foot.....(Design)...	Oct. 7, 1873	.....	.....	4	380
	Attix, T. F. (See Carson, T., assignor.)					
144, 494	Atwater, A. A., Smith Valley, N. Y. Car-coupling.....	Nov. 11, 1873	279	94	4	513
	Atwater Manufacturing Company. (See Deeble, J., assignor.)					
	Same.....(See Knowles, W. W., assignor.)					
	Atwell, J., et al. (See Haner, W. W., assignor.)					
142, 551	Atwell, R. H., Baltimore, Md. Motor for driving sewing-machines.....	Sept. 9, 1873	214	69, 70	4	271
140, 339	Atwood, A., Brooklyn, N. Y., assignor of one-half interest to I. D. Condit, Millburn, N. J. Car-wheel.....	July 1, 1873	3	1	4	8
136, 404	Atwood, A. N., Philadelphia, Pa. Composition for burial-caskets.....	Mar. 4, 1873	45	.....	3	249
	Atwood, E. A. (See Bodwell & Atwood.)					
5, 656	Atwood, E. A., and H. H. Bodwell, San Francisco, Cal. Windmill.....(Reissue)...	Nov. 18, 1873	560	190	4	547
142, 885	Same.....same.....	Sept. 16, 1873	500	171	4	305
138, 114	Atwood, J. E., Mansfield, Conn. Rolling-mill.....	Apr. 22, 1873	770	245	3	453
138, 780	Atwood, J. E., Pittsburgh, Pa. Compound for lining bottoms of Bessemer or Kelly converters.....	May 13, 1873	290	.....	3	531
138, 781	Same.....Compound for tuyeres.....	May 13, 1873	291	.....	3	531
144, 495	Same.....Car-wheel.....	Nov. 11, 1873	280	94	4	513
144, 726	Same.....Manufacture of Bessemer-steel-converter tuyeres.....	Nov. 18, 1873	481	.....	4	540
	Atwood, L. J., et al. (See Capewell, G. J., assignor.)					
135, 749	Atwood, L. J., assignor to The Plume & Atwood Manufacturing Company, Waterbury, Conn. Lamp.....	Feb. 11, 1873	334	107	3	166
138, 601	Same.....Lamp-burner.....	May 6, 1873	116	38	3	507
141, 251	Same.....Shade or globe-holder for lamps.....	July 29, 1873	857	280	4	113
141, 252	Same.....Shade-holder.....	July 29, 1873	858	280	4	113
	Aubin, A. N. N. (See Hulbert & Aubin.)					
136, 690	Aufdembrinke, H., Cincinnati, Ohio. Pitman.....	Mar. 11, 1873	309	102	3	279
142, 138	Augsperger, J. K., Trenton, Ohio. Harvester-rake.....	Aug. 26, 1873	687	226	4	217
140, 668	Auguste, B., assignor of one-third interest to B. Gotia, Chicago, Ill. Artificial marble...	July 8, 1873	291	.....	4	43
142, 189	Aulbach, J., assignor of one-half interest to A. Pregamann, West Meriden, Conn. Lamp chandelier.....	Aug. 26, 1873	726	240	4	221
145, 608	Auld, D., jr., Glasgow, North Britain. Furnace-door.....	Dec. 16, 1873	517	169	4	651
141, 619	Auld, J. E., Buffalo, N. Y. Oil-can.....	Aug. 12, 1873	200	63	4	159
	Aust, W. (See Pfefferkorn & Aust.)					
135, 875	Austin, C., Concord, N. H. Reed-organ.....	Feb. 18, 1873	464	149	3	190
136, 952	Austin, E. H., New York, N. Y. Pipe for gas, water, &c.....	Mar. 18, 1873	540	178	3	307
138, 115	Same.....Subterranean telegraph-line.....	Apr. 22, 1873	771	246	3	453
143, 315	Austin, E. H., Scott's Hill, Tenn. Feed-regulator for grinding-mills.....	Sept. 30, 1873	870	298	4	362
135, 684	Austin, H. K., assignor to self and G. V. Millett, Charlestown, Mass. Handle for files....	Feb. 11, 1873	284	89	3	162

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 237	Austin, J., & Co. (See Wheatcroft, H. B., assignor.)	June 24, 1873	740	233	3	700
140, 989	Austin, J. E., Philadelphia, Pa. Exercising device.....	July 22, 1873	600	203	4	85
	Austin, R. M., Philadelphia, Pa. Combined ruler and blotter.....					
	Austin, S. (See Steel & Austin.)					
	Austin, T. P. (See Farrington & Austin.)					
135, 750	Austin, T. P., New York, N. Y. Machine for stamping sheet-metal ware.....	Feb. 11, 1873	335	107	3	166
141, 748	Austin, W., Philadelphia, Pa. Sheet-metal bucket.....	Aug. 12, 1873	307	100	4	168
	Autenrieth, G. (See Springer, T., assignor.)					
	Automatic Boiler-Feeder Company. (See Cook, S., assignor.).....(Reissue.)					
	Automatic Car-Brake Manufacturing Company. (See En-Earl, G., assignor.)					
135, 751	Averell, E. D., New York, N. Y. Paper-ruling machine.....	Feb. 11, 1873	337	108	3	166
143, 488	Averell, J. D., New York, N. Y. Commode.....	Oct. 7, 1873	76	26	4	387
143, 555	Averell, J. D., New York, assignor of part interest to S. A. Joice, Brooklyn, N. Y. Oxy-hydrocarbon gas-burner.....	Oct. 14, 1873	151	51	4	401
	Averill Chemical Paint Company. (See Averill, D. R., assignor.).....(Reissue.)					
5, 695	Averill, D. R., New Centreville, N. Y., assignor to The Averill Chemical Paint Company, New York, N. Y. Paint.....	Dec. 23, 1873	807		4	686
141, 415	Averill, J. W., New Market, N. H. Gas-burner.....	Aug. 5, 1873	4	1	4	135
	Avery, B. F. (See Wiard, E., assignor.)					
138, 361	Avery, O. M., Pensacola, Fla. Dumping-car.....	Apr. 29, 1873	1,016	320	3	481
	Avis, J. W. (See Tait & Avis.)					
140, 804	Awrey, E. M., Smithville P. O., Canada. Harvester.....	July 15, 1873	412	140	4	61
	Axford, W. (See Johnson & Axford.)					
	Axtell, H. A., et al. (See Park, F., assignor.)					
140, 755	Ayer, D. M., assignor to E. W. Ayer, Lawrence, Mass. Drip-cup for candles.....	July 15, 1873	371	127	4	58
	Ayer, E. W. (See Ayer, D. M., assignor.)					
137, 282	Ayers, A. P., Benton Harbor, Mich. Spool-holder and thread-cutter.....	Apr. 1, 1873	3	1	3	357
135, 685	Ayers, C., Farmington Centre, Wis. Tree protector.....	Feb. 11, 1873	285	89	3	162
137, 648	Ayers, J. W., West Meriden, Conn. Handle of pocket-knives.....	Apr. 8, 1873	335	104	3	396
	Ayers, J. A. (See Pierce & Ayres.)					
137, 754	Ayres, J. A., Mystic River, Conn. Water-elevator.....	Apr. 15, 1873	442	{ 137 } { 138 }	{ 3 }	417
	Babbett, A., deceased, by H. M. Babbett, executrix, Auburn, N. Y. Jacquard-machine. (Extension).....	Oct. 18, 1873			4	400
25, 796	Same..... Jacquard-machine.....(Disclaimer filed)	Oct. 11, 1873			4	401
	Babbett, H. M., executrix. (See Babbett, A.).....(Disclaimer.)					
	Same..... same.....(Extension.)					
139, 944	Babbitt, B. T., New York, N. Y. Propelling-device for vessels.....	June 17, 1873	508	161	3	673
142, 663	Same..... Boiler and condenser.....	Sept. 9, 1873	308	102	4	279
142, 664	Same..... same.....	Sept. 9, 1873	309	103	4	279
142, 665	Same..... Marine-condenser.....	Sept. 9, 1873	310	103	4	279
135, 876	Babbitt, G. R., assignor by mesne assignment to self and W. A. Harris, Providence, R. I. Steam-tight joint of valve-stems.....	Feb. 18, 1873	465	149	3	190
136, 405	Babbitt, G. R., and W. A. Harris, Providence, R. I. Piston-packing.....	Mar. 4, 1873	46	16	3	249
145, 776	Babbitt, S., Brazil, Ind., assignor to self and W. E. Sibley, Boston, Mass. Shoe-fastening.....	Dec. 23, 1873	675	221	4	676
	Babcock, C. (See Tisdale, W. D., assignor.)					
	Babcock, E. N. (See Nixon & Babcock.)					
	Babcock, G. H., Plainfield, N. J. Bronzing-machine.....(Extension)	Oct. 25, 1873			4	425
134, 505	Babcock, G. H., Plainfield, N. J., and S. Wilcox, Brooklyn, N. Y. Sectional steam-boiler.....	Jan. 7, 1873	1	1	3	7
135, 877	Same..... Sectional steam-boiler.....	Feb. 18, 1873	466	150	3	190
136, 691	Same..... Steam-generator.....	Mar. 11, 1873	310	103	3	279
139, 448	Same..... Steam-engine.....	June 3, 1873	1	1	3	609
136, 953	Babcock, J. F., W. A. Leonard, and E. B. Crane, Boston, Mass. Watch composition.....	Mar. 18, 1873	541		3	307
	Babcock, J. K., et al. (See Spencer, J. C., assignor.)					
135, 958	Babcock, J. W., Chicopee, Mass. Machine for lifting and carrying barrels, boxes, &c.....	Feb. 18, 1873	529	174	3	195
134, 966	Babcock, S. P., Adrian, Mich. Tuck-creaser.....	Jan. 21, 1873	141	141	3	71
143, 741	Same..... Tuck-creaser for sewing-machines.....	Oct. 21, 1873	341	114	4	446
	Bach, J. (See Green, J., assignor.)					
134, 833	Bacheller, S. B., McDonough, N. Y. Fly-trap.....	Jan. 14, 1873	317	107	3	45
138, 224	Backmayr, M., Lyons, Wis. Blinders for cattle.....	Apr. 29, 1873	891	281	3	471
	Backus, O. J. (See Hyde, L., assignor.).....(Reissue.)					
144, 727	Backus, S. D., New York, N. Y. Chain-tackle block.....	Nov. 18, 1873	482	163	4	540
145, 714	Bacon, C. H., assignor to self and J. H. Sawyer & Co., Boston, Mass. Peg-cutter.....	Dec. 23, 1873	620	203	4	672
145, 381	Bacon, E. N., Chelsea, Vt. Combined bow-fastener and guard for ox-yokes.....	Dec. 9, 1873	306	103	4	622
	Bacon, G. (See Bacon, J. & G.)					
138, 065	Bacon, J. & G., Medina, Wis. Weather-strip.....	Apr. 22, 1873	733	232	3	450
	Bacon, J. T., & Co. (See Davis, W. F., assignor.)					
144, 246	Bader, J., Olathe, Kans. Door-check.....	Nov. 4, 1873	68	22	4	483
	Badger, S. (See Haynes, W. A., assignor.).....(Design.)					
141, 687	Badley, D. L., Afton, Iowa. Tire-upsetting machine.....	Aug. 12, 1873	259	84	4	164
	Baechler, C., et al. (See Moore, C., assignor.)					
	Bagby, G. K. (See Bailey & Bagby.)					
	Bagger, L. (See Moore & Bagger.)					
139, 995	Bagger, L., Washington, D. C. Bath-tub.....	June 17, 1873	508	161	3	673
145, 144	Baggs, A. H., assignor to La Belle Glass Company, Bridgeport, Ohio. Manufacture of glass-ware.....	Dec. 2, 1873	98	{ 32 } { 33 }	{ 4 }	593
145, 145	Same..... Salver.....	Dec. 2, 1873	99	33	4	593
	Baggs, A. J. (See Baggs, J. T., assignor.)					
138, 362	Baggs, J., Easton, Md. Butchers' combined knife, saw, and spring-scales.....	Apr. 29, 1873	1,017	320	3	481
138, 552	Baggs, J. T., assignor of one-fourth interest to A. J. Baggs, Bridgeport, Ohio. Sawing-machine.....	May 6, 1873	77	25	3	504
134, 967	Bagley, A., Ypsilanti, Mich. Self-locking rail-fence.....	Jan. 21, 1873	142	141	3	71
144, 247	Bagnall, W., Otsego, Ohio. Cultivating-plow.....	Nov. 4, 1873	69	22	4	483
139, 529	Bailey, A. S., assignor of one-half interest to E. Little, Paxton, Ill. Car-pusher.....	June 3, 1873	72	25	3	615
137, 589	Bailey, C., assignor to self and H. C. Bailey. Dentist's flask.....	Apr. 8, 1873	287	89	3	392
138, 363	Bailey, C., and G. K. Bagby, Kinston, N. C. Cotton-chopper.....	Apr. 29, 1873	1,018	320	3	481
	Bailey, C. M. (See Hoskin, R., assignor.).....(Design.)					
	Bailey, C. M. (See Webster, A., jr., assignor.).....(Design.)					
143, 053	Bailey, E. H., Brooklyn, N. Y. Machine for manufacturing carpet-linings.....	Sept. 23, 1873	653	223	4	327
	Bailey, Farrell & Co. (See Bailey, H. J., assignor.)					
135, 618	Bailey, F. L., Boston, and J. Watson, Everett, Mass. Printing-press.....	Feb. 11, 1873	223	69	3	157
143, 489	Bailey, F. L., Boston, assignor to J. Watson, Everett, Mass. Inking apparatus.....	Oct. 7, 1873	77	26	4	387
	Bailey, H. C. (See Bailey, C., assignor.)					
5, 286	Bailey, H. D. W., Sterling, Ill. Spring bed-bottom.....(Reissue)	Feb. 18, 1873	681	220	3	206
141, 416	Bailey, H. J., assignor to Bailey, Farrell & Co., Pittsburgh, Pa. Gage-cock.....	Aug. 5, 1873	5	2	4	135

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136, 806	Bailey, J., assignor of one-half interest to H. Breiterstein, Quincy, Ill. Direct-acting steam-engines	Mar. 18, 1873	419	139	3	297
139, 852	Bailey, J., Springport, Ind. Cooper's croze	June 17, 1873	390	122	3	663
138, 364	Bailey, J. J., New York, N. Y. Refrigerator	Apr. 29, 1873	1, 019	321	3	481
135, 256	Bailey, J. M., Meridian, Miss. Machine for sharpening gin-saws	Jan. 28, 1873	718	230	3	105
145, 715	Bailey, L., New Britain, Conn. Try-square	Dec. 23, 1873	620	203	4	672
	Bailey, S. A., Woonsocket, R. I. Machine for wringing clothes	Apr. 5, 1873			3	325
	Bailey Tool Company. (See Brown & Williams, assignors.)					
112, 758	Bailey, T. W., Savannah, Ohio. Eaves-trough hanger	Sept. 16, 1873	400	135	4	296
	Bailey, W., et al. (See Reed, G. D., assignor.)					
139, 038	Bailey, W., Brooklyn, assignor to G. B. Sloan, Oswego, N. Y. Machine for stretching and drying cloth	May 20, 1873	517	163	3	563
	Bailey Washing and Wringing Machine Company. (See Glass, H., assignor) (Reissue.)					
	Bailey, W. W. (See Towne & Bailey.)					
135, 257	Bainbridge, D., Philadelphia, Pa. Vibrating propeller for vessels	Jan. 28, 1873	719	230	3	105
141, 535	Baines, J. A., assignor of one-half interest to J. Barker, New York, N. Y. Metallic plane	Aug. 5, 1873	108	{ 33 } 34	4	144
139, 648	Baird, D. W., Geneva, N. Y. Spring-clip for carriages	June 10, 1873	193	63	3	641
143, 316	Same..... Concealed jointed brace for carriage-tops	Sept. 30, 1873	871	298	4	362
144, 429	Baird, J. C., and M. Miller, Heaton, Ill. End-gate for wagons	Nov. 11, 1873	228	76	4	508
	Baird, J. M. (See Orr & Baird.)					
141, 308	Baird, J. M., assignor to self and R. Stanley, Wheeling, W. Va. Hoe	July 29, 1873	905	297	4	118
143, 431	Baird, J. M., Wheeling, W. Va. Fastening for bedsteads, &c	Oct. 7, 1873	32	11	4	383
138, 116	Baird, O. D., Newark, assignor to S. Southworth and E. Dorchester, Geneva, N. Y. Rail-way snow-plow	Apr. 22, 1873	772	246	3	453
136, 954	Baird, R., Stirling, Scotland. Punching-machine	Mar. 18, 1873	542	179	3	307
	Baisley, G. H. (See Wilson & Baisley.)					
140, 756	Baisley, G. H., and G. Wilson, said Baisley assignor to I. V. Splawn, Hamilton, Mo. Earth-auger	July 15, 1873	371	127	4	58
137, 167	Baker, A. E., assignor to H. W. Gardner, Providence, R. I. Reciprocating steam-engine	Mar. 25, 1873	739	{ 245 } 246	3	334
	Baker, A. O. (See Black, J. B., assignor.)					
	Baker, A. O. (See Grant, S. W., assignor.)					
	Baker, A. S. (See Shaw & Baker.)					
	Baker, C. E. (See Scholfield & Baker.)					
144, 496	Baker, C. L. W., assignor to J. L. Mason, Camden, N. J. Brush	Nov. 11, 1873	280	95	4	513
144, 728	Same..... Feather-duster	Nov. 18, 1873	483	163	4	540
145, 479	Same..... Brush-holder	Dec. 15, 1873	401	132	4	642
146, 041	Baker, C. L. W., Camden, assignor to J. L. Mason, New Brunswick, N. J. Clamp for splicing broom-handles, &c	Dec. 30, 1873	923	299	4	707
138, 838	Baker, D. C., Fulton, N. Y. Cultivator	May 13, 1873	342	{ 105 } 106	3	535
139, 649	Baker, E., Millstone, N. J. Manufacture of spiegeleisen	June 10, 1873	193		3	641
	Baker, E. L. (See Chase, C. M., assignor.)					
139, 996	Baker, H. H., New Market, N. J. Propelling canal-boats	June 17, 1873	509	161	3	673
	Baker, H. M., et al. (See Hunter, G. W., assignor.)					
143, 866	Baker, I. L., Dayton, Ohio. Mold for sealing-wax	Oct. 21, 1873	447	149	4	435
7, 024	Baker, J. G., Philadelphia, Pa., assignor to Enterprise Manufacturing Company of Penn-sylvania. Fly-wheel	Dec. 9, 1873			4	614
135, 752	Same..... Machine for setting saws	Feb. 11, 1873	339	108	3	166
143, 867	Same..... Grinding-mill	Oct. 21, 1873	448	149	4	435
145, 382	Baker, J. G., Philadelphia, Pa. Blowing-machine	Dec. 9, 1873	307	103	4	623
136, 692	Baker, J. H., and A. Doney, Saratoga Springs, N. Y. Bed-springs	Mar. 11, 1873	311	103	3	279
145, 830	Baker, J. H., A. Doney, and F. N. Owen, Saratoga Springs, N. Y. Tool	Dec. 23, 1873	716	235	4	680
141, 100	Baker, J. M. B., Southsea, England. Disinfecting and deodorizing apparatus for water-closets	July 22, 1873	698	234	4	93
	Baker, L., administrator. (See Martin & Wilson.)					
134, 834	Baker, L. H., Washington, D. C. Chair	Jan. 14, 1873	317	101	3	45
	Baker, R., et al. (See Rodier & Bates, assignors.)					
144, 882	Baker, S., and S. C. McIntire, Springfield, Ohio. Rotary engine	Nov. 25, 1873	626	212	4	563
139, 853	Baker, S. E., Chicago, Ill. Pile-driver	June 17, 1873	390	122	3	663
142, 886	Baker, W. Ilion, assignor to the Biddle Manufacturing Company, New York, N. Y. Pruning-shears	Sept. 16, 1873	501	171	4	305
	Baker, W. C. (See Williams, N. W., assignor.)					
144, 047	Baker, W. C., New York, N. Y. Steam-generator	Oct. 28, 1873	624	206	4	459
144, 650	Same..... Heating-apparatus	Nov. 18, 1873	423	142	4	535
	Baker, W. E. (See Crump, C. H., assignor.)					
138, 553	Baker, W. M., Fortville, Ind. Refrigerator	May 6, 1873	78	25	3	504
143, 607	Same..... same	Oct. 14, 1873	194	65	4	405
	Baker, W. T. (See Wheelock, W., assignor.)					
5, 461	Balback, E., jr., Newark, N. J. Separating zinc from gold and silver	June 24, 1873	835	265	3	708
139, 449	Same..... Retort-furnace for separating zinc from gold, silver, &c	June 3, 1873	2	1	3	609
141, 912	Same..... Furnace for smelting ores	Aug. 19, 1873	471	154	4	190
136, 807	Balcom, H., assignor to self and A. H. Partridge, Ann Arbor, Mich. Machine for point-ing pickets	Mar. 18, 1873	422	140	3	297
135, 959	Balderston, J. H., Colona, Md. Bread-worker	Feb. 18, 1873	529	174	3	195
134, 835	Balding, A., Wheeling, W. Va. Water-elevator	Jan. 14, 1873	318	101	3	45
138, 310	Baldwin, F. S., Saint Louis, Mo. Lumber-measure	Apr. 29, 1873	976	307	3	478
140, 340	Same..... Electrical anemometer	July 1, 1873	4	2	4	8
136, 481	Baldwin, G., Monroe, Mich. Brick and tile machine	Mar. 4, 1873	111	37	3	254
141, 688	Baldwin, H. C., North Wolcott, Vt. Milk and cream cooler	Aug. 12, 1873	260	84	4	164
139, 530	Baldwin, J. F., Nashua, N. H., assignor to self and Miles Alarm-Till Manufacturing Company, Providence, R. I. Till-alarm	June 3, 1873	73	25	3	615
145, 777	Same..... same	Dec. 23, 1873	676	221	4	676
139, 939	Baldwin, J. F., Nashua, N. H. Till-alarm	June 17, 1873	467	146	3	669
144, 823	Baldwin, J. F., Boston, Mass., assignor to J. Sully, trustee, Dedham, Mass. Metallic plane	Nov. 25, 1873	575	196	4	558
	Baldwin, J. L., et al. (See Carter & Keith, assignors.)					
135, 062	Baldwin, J. S., Newark, N. J. Steam-generator	Jan. 21, 1873	530	172	3	78
138, 984	Same..... Means for closing hatchways	May 20, 1873	472	149	3	559
138, 985	Same..... Elevator	May 20, 1873	473	149	3	559
137, 649	Baldwin, L., Stone Mills, N. Y. Cultivator	Apr. 8, 1873	336	104	3	396
	Baldwin, M. (See Poulson, J., assignor.)					
142, 887	Baldwin, M. O., Namego, Kans. Medicine-case	Sept. 16, 1873	502	171	4	305
134, 836	Baldwin, S. W., Yonkers, N. Y. Inkstand	Jan. 14, 1873	319	102	3	45
139, 354	Same..... Machine for molding boot and shoe bottoms	May 27, 1873	814	260	3	595

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No.	Name, residence, and invention.	Date.	Month y volume.		Official Gazette.	
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	Baldwin, W. (See Daffin, T., assignor.)					
136, 018	Baldwin, W. H., New York, N. Y. Type-setting machine.....	Feb. 18, 1873	581	191	3	199
5, 271	Balkwill, S. and W. W., Cleveland, Ohio. Railway-car brake..... (Reissue)	Feb. 11, 1873	444	145	3	174
	Balkwill, W. W. (See Balkwill, S. and W. W.)..... (Reissue)					
134, 506	Ball, A., assignor to Sullivan Machine Company, Claremont, N. H. Guide for rotary rock-drills.....	Jan. 7, 1873	3	1	3	8
135, 063	Ball, A., assignor to self and C. P. Nelson, Milford, Mass. Combined blind-opener and slot-regulator.....	Jan. 21, 1873	531	172	3	78
5, 479	Ball, C., Augusta, Mich., assignor of one-half interest to T. Marriott. Toy..... (Reissue)	July 8, 1873	367	124	4	49
138, 365	Ball, C., Augusta, assignor of one-half interest to T. Marriott, Detroit, Mich. Toy.....	Apr. 29, 1873	1, 020	321	3	481
142, 759	Ball, C. A., assignor of one-fourth interest to E. Whritnoeur, Ridgewood, N. J. Truck for transporting railway-rails, car-axles, &c.....	Sept. 16, 1873	401	135	4	296
140, 108	Ball, C. E., Philadelphia, Pa. Argand-burner.....	June 24, 1873	634	199	3	691
139, 997	Ball, D. H., Sinnamahoning, Pa. Traction-engine.....	June 17, 1873	510	162	3	673
	Ball, E., deceased, by D. Cobaugh, administrator, Canton, Ohio. Harvester. (Extension).....	Oct. 18, 1873			4	400
145, 831	Ball, E. P., Chicopee, Mass. Loom-shuttle.....	Dec. 23, 1873	717	236	4	680
135, 506	Ball, G. M., Brooklyn, N. Y., assignor to L. Herman, New York, N. Y. Shaft-bearings.....	Feb. 4, 1873	102	32	3	135
145, 778	Ball, H. S., Spartanburgh, S. C. Pen-wiper.....	Dec. 23, 1873	677	221	4	676
144, 591	Ball, J. S., Mishawaka, Ind. Hay-knife.....	Nov. 18, 1873	370	125	4	531
142, 979	Ball, P., Worcester, Mass. Riveting joints of sheet-metal.....	Sept. 23, 1873	587	200	4	322
144, 048	Same..... Valve-motion for gates and hydrants.....	Oct. 28, 1873	625	206	4	459
138, 466	Ball, P., and B. Fitts, Worcester, Mass. Water-filter.....	May 6, 1873	1	1	3	498
	Ball, R., & Co. (See Smith, E. H., assignor.)					
143, 114	Ball, W. E., Bethesda, Ohio. Pruning-shears.....	Sept. 23, 1873	699	240	4	331
141, 481	Ball, W. H., Brooklyn, N. Y. Insect-powder gun.....	Aug. 5, 1873	63	20	4	140
145, 083	Ballagh, A. H., Bowensburgh, assignor to self and M. McNitt, Mound Station, Ill. Riding attachment for plows.....	Dec. 2, 1873	43	13	4	589
143, 216	Ballantine, A. T., Titusville, Pa. Oil-cup.....	Sept. 30, 1873	783	271	4	354
136, 202	Ballard, A. J., Cohoes, N. Y., assignor to Union Water-Meter Company, Worcester, Mass. Steam-pressure regulator.....	Feb. 25, 1873	755	244	3	224
	Ballard, Fast & Co. (See Ballard, M. L., assignor.)					
137, 046	Ballard, J., Almont, Mich. Washing-machine.....	Mar. 25, 1873	633	209	3	326
137, 401	Ballard, M. L., Canton, Ohio. Nut-lock.....	Apr. 1, 1873	108	35	3	366
137, 402	Ballard, M. L., assignor to Ballard, Fast & Co., Canton, Ohio. Saw-handle.....	Apr. 1, 1873	109	35	3	366
141, 025	Ballou, C. C., Albany, assignor to the East New York Boot, Shoe, and Leather Manufacturing Company, New York, N. Y. Sole-channeling machine.....	July 22, 1873	631	213	4	88
142, 980	Same..... Heel-trimming machine.....	Sept. 23, 1873	589	200	4	323
142, 140	Ballou, J., Boston, Mass. Ventilator.....	Aug. 26, 1873	688	226	4	217
144, 651	Bancker, F. A., New York, N. Y. Toy gymnast.....	Nov. 18, 1873	423	142	4	535
134, 837	Bancroft, J. B., Hopedale, Mass. Shuttle-guide for looms.....	Jan. 14, 1873	320	102	3	46
135, 619	Same..... Warping-machine.....	Feb. 11, 1873	223	70	3	157
140, 757	Same..... Adjustable spinning-ring.....	July 15, 1873	372	127	4	58
145, 549	Same..... Machine for preparing printers' rules.....	Dec. 16, 1873	471	154	4	647
145, 925	Bancroft, J. B., assignor to self and G. and W. F. Draper, Hopedale, Mass. Shuttle-guide for looms.....	Dec. 30, 1873	825	269	4	698
137, 525	Bancroft, L., assignor of two-thirds interest to L. Brown and W. G. Bryant, Springfield, Ohio. Construction of sheet-metal elbows.....	Apr. 8, 1873	231	71	3	387
5, 325	Bancroft, L. F., Worcester, Mass., assignor by mesne assignment to E. E. Quimby, trustee, New York, N. Y. Street-sprinkler..... (Reissue)	Mar. 18, 1873	623	206	3	314
143, 490	Bandon, J., and J. Wiggim, jr., Dayton, Ohio. Middlings-purifier.....	Oct. 7, 1873	78	26	4	387
	Banes, C. H. (See Tully, F., assignor.)					
138, 117	Banister, L., Newark, N. J. Shoe-fastening.....	Apr. 22, 1873	773	246	3	453
138, 986	Banker, G. W., New York, N. Y. Metal can for oil, &c.....	May 20, 1873	474	149	3	560
136, 637	Bannibr, J., Hempstead, and D. H. Rhodes, Baldwinsville, N. Y. Bag-tie.....	Mar. 11, 1873	268	90	3	276
141, 253	Banning, E. P., sr., assignor to Banning Truss and Brace Company, New York, N. Y. Pessary.....	July 29, 1873	858	280	4	114
	Banning Truss and Brace Company. (See Banning, E. P., sr., assignor.)					
141, 026	Bannister, A., Alameda, Cal. Truss-bridge.....	July 22, 1873	632	213	4	88
140, 341	Banta, C. W., Orange, N. J. Apparatus for steaming hats.....	July 1, 1873	6	2	4	8
139, 854	Bantz, E., Baltimore, Md. Means for creating artificial currents.....	June 17, 1873	391	122	3	663
141, 749	Bapterosses, J. F., Paris, France. Machine for making buttons.....	Aug. 12, 1873	308	101	4	168
142, 367	Baptista, J. B., New York, N. Y. Rudder for vessels.....	Sept. 2, 1873	41	14	4	245
142, 835	Same..... Means of adjusting paddle-floats.....	Sept. 16, 1873	462	156	4	302
136, 203	Baquet, J., Baltimore, Md. Compound for expelling flies from rooms.....	Feb. 25, 1873	756		3	224
138, 839	Baranger, H., assignor to J. F. Chapman and L. H. Baranger, Saint Louis, Mo. Fare-box.....	May 13, 1873	343	106	3	536
140, 669	Baranger, H., Saint Louis County, Mo. Fare-box.....	July 8, 1873	292	98	4	43
	Baranger, L. H., et al. (See Baranger, H., assignor.)					
137, 403	Baranowski, J. J., London, England, assignor to D. H. Brandon, Paris, France. Machine for making plaited capsules.....	Apr. 1, 1873	109	35	3	366
144, 592	Barbee, W. G., High Point, N. C. Preserving fruit and vegetables for food.....	Nov. 18, 1873	371		4	531
144, 944	Barber, B. J., Ballston Spa, N. Y. Water-wheel.....	Nov. 25, 1873	674	228	4	567
	Barber, R. P. (See Temple, J., assignor.)					
	Barbour Flax-Spinning Company. (See Meldrum, J. B., assignor.)					
	Barbour, J. M. (See Welpton, J. B., assignor.)					
135, 753	Barbour, J. W., assignor by mesne assignment of one-half interest to T. Collamer, Winoski Falls, Vt. Mop-head.....	Feb. 11, 1873	340	109	3	166
134, 722	Barbour, T. P., Louisville, Ky., assignor of one-half interest to L. B. Bruen, Newark, N. J. Harvester-rake.....	Jan. 14, 1873	221	71	3	38
140, 670	Barclay, D. F., Elgin, Ill. Cheese-vat.....	July 8, 1873	293	99	4	43
137, 590	Bard, J. L., New Orleans, La. Construction of metallic casks.....	Apr. 8, 1873	288	89	3	392
140, 869	Bardell, A., Williamsburgh, N. Y. Sifter.....	July 15, 1873	467	158	4	65
142, 191	Bardell, A., New York, N. Y. Refrigerator.....	Aug. 26, 1873	728	240	4	221
134, 626	Barden, J. S., Providence, R. I. Pump.....	Jan. 7, 1873	116	38	3	16
144, 049	Bardsley, J., Akron, Ohio. Spark-arrester.....	Oct. 28, 1873	626	207	4	459
	Barjon, V. (See Nolf, A. L., assignor.)					
5, 671	Barker, C., assignor to self and T. C. Thomas, Maquon, Ill. Grain-car door..... (Reissue)	Dec. 2, 1873	207	70	4	601
141, 689	Barker, C. F., Boston, Mass. Making artificial marble.....	Aug. 12, 1873	261		4	164
	Barker, C. M. (See Johnson & Barker.)					
140, 452	Barker, D., Northfleet, England. Manufacture of artificial fuel.....	July 1, 1873	90		4	16
142, 072	Barker, E. A., Providence, R. I. Croquet-wicket driver.....	Aug. 26, 1873	629	207	4	213
143, 608	Barker, E. B., Brooklyn, N. Y., assignor to E. & H. T. Anthony & Co., New York, N. Y. Photographic cameo-embossing press.....	Oct. 14, 1873	195	66	4	405
140, 805	Barker, E. W., assignor of one-half interest to C. S. Clark, Portland, Me. Car coupling.....	July 15, 1873	413	140	4	61
145, 926	Barker, G. E., and S. F. Mack, Waverly, N. Y. Air-pump.....	Dec. 30, 1873	825	269	4	699
142, 190	Barker, G. F., New Haven, Conn., and A. M. Mayer, Hoboken, N. J. Thermoscope.....	Aug. 26, 1873	727		4	221

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
135, 507	Barker, G. R., Germantown, Pa. Ventilator.....	Feb. 4, 1873	103	33	3	135
141, 101	Same..... Hot-air flue for heating furnaces.....	July 22, 1873	699	234	4	93
143, 868	Same..... Philadelphia, Pa. Ventilator for buildings.....	Oct. 21, 1873	449	149	4	435
145, 272	Barker, G. W., Saint John's, Mich. Churn-dasher.....	Dec. 9, 1873	215	74	4	615
145, 716	Barker, H. H., Hartford, Conn. Combined step-ladder, bench, and clothes-frame.....	Dec. 23, 1873	621	204	4	672
	Barker, J. (See Baines, J. A., assignor.)					
142, 666	Barker, J., Covington, Ky. Pile or fagot.....	Sept. 9, 1873	311	103	4	279
135, 878	Barker, J. C., assignor of one-half interest to J. L. Branson, Chicago, Ill. Folding-case.....	Feb. 18, 1873	467	150	3	190
139, 650	Barker, P. M., Grand Haven, Mich. Double-acting pump.....	June 10, 1873	194	63	3	641
145, 551	Barlow, G. W., New York, N. Y. Skate-fastening.....	Dec. 16, 1873	473	154	4	647
140, 870	Barlow, W. A., Chicago, Ill. Summer stove.....	July 15, 1873	467	158	4	65
145, 550	Same..... Culinary vessel.....	Dec. 16, 1873	473	154	4	647
142, 888	Barman, L., Portland, Oreg. Porter's box.....	Sept. 16, 1873	503	172	4	305
	Barmore, B. M. (See Dick, D., assignor.)					
6, 895	Barnard and Leas Manufacturing Company. (See Barnard, H. A., assignor.)					
135, 754	Barnard, C. S. and E. A., West Meriden, Conn. Call-bell..... (Design).....	Sept. 30, 1873			4	354
	Same..... Drawer-pull.....	Feb. 11, 1873	340	109	3	166
	Barnard, E. A. (See Barnard, C. S. and E. A.)					
	Same..... same..... (Design).....					
144, 050	Barnard, H. A., assignor to Barnard and Leas Manufacturing Company, Moline, Ill.					
	Smut-mill.....	Oct. 28, 1873	627	207	4	460
143, 115	Barnard, R. W., Kennett Square, Pa. Cream-strainer.....	Sept. 23, 1873	700	240	4	331
142, 981	Barnard, T. C., West Meriden, Conn. Device for hanging picture-frames.....	Sept. 23, 1873	590	200	4	323
139, 998	Barnard, W. H., Washington, D. C. Temporary binder.....	June 17, 1873	511	162	3	673
138, 987	Barnes, C. E., Boston, Mass. Stop-mechanism for looms.....	May 20, 1873	475	149	3	560
144, 051	Barnes, D. A., Chicago, Ill. Can-opener and pipe-cutter.....	Oct. 28, 1873	628	207	4	460
135, 064	Barnes, E. F. and G. A., New Haven, Conn. Metal turning-lathe.....	Jan. 21, 1873	532	172	3	78
	Barnes, G. A. (See Barnes, E. F. and G. A.)					
138, 554	Barnes, G. B., and J. A. Leasure, Bellaire, Ohio. Sifter, mixer, and grinder for glass stock.....	May 6, 1873	79	25	3	504
135, 462	Barnes, H. R., Rock Stream, N. Y. Hoe.....	Feb. 4, 1873	66	21	3	132
137, 755	Same..... same.....	Apr. 15, 1873	443	138	3	417
	Barnes, J. (See Barnes, W. F. and J., and P. Mesick.)					
	Barnes, J. (See Rice & Barnes.)					
135, 960	Barnes, J., assignor to self and J. Woodhouse, Holyoke, Mass. Spindle-bolster.....	Feb. 18, 1873	530	175	3	195
142, 141	Barnes, P. W., Albany, N. Y. Fire-escape.....	Aug. 26, 1873	689	226	4	217
5, 216	Barnes, S. H., deceased, by F. L. Egbert, executrix, New York, N. Y. Corset-spring. (Reissue).....	Jan. 7, 1873	206	66	3	23
	Barnes, W., et al. (See Mears, J. H., assignor.)					
141, 309	Barnes, W., Maquoketa, Iowa. Pump-valve.....	July 29, 1873	905	297	4	118
138, 467	Barnes, W. A., Bridgeport, Conn. Fire-alarm.....	May 6, 1873	3	1	3	498
141, 258	Barnes, W. B., Plymouth, assignor of one-half interest to S. Talbot, jr., Boston, Mass.					
	Car-coupling.....	July 29, 1873	862	282	4	114
141, 981	Barnes, W. F. and J., and P. Mesick, Rockford, Ill. Bobbin-holder for sewing-machines.....	Aug. 19, 1873	522	173	4	195
	Barnes, W. G., et al. (See Mears, J. H., assignor.)					
143, 399	Barnett, J. P., Navasota, Tex. Medical compound.....	Oct. 7, 1873	2		4	381
137, 876	Barnett, S. M., New York, N. Y. Exercising-machine.....	Apr. 15, 1873	547	171	3	426
134, 627	Barney, A., Wilmington, Del. Railway-car seat.....	Jan. 7, 1873	119	39	3	16
143, 656	Barney, C. H., assignor to G. Mooney and J. Shaw, jr., Providence, R. I. Manufacture of globe-holders.....	Oct. 14, 1873	235	79	4	408
137, 526	Barney, E. H., Springfield, Mass. Skate.....	Apr. 8, 1873	232	71	3	387
5, 468	Barney, G., Swanton, Vt., and V. G. Barney, Charles City, Iowa. Machine for dressing tiles..... (Reissue).....	July 1, 1873	195	65, 66	4	24
7, 077	Barney, S. E., New Haven, Conn. Ruffling..... (Design).....	Dec. 30, 1873			4	698
	Barney, V. G. (See Barney, G. and V. G.)					
	Barnum, C. (See Devlan, P. S., assignor.)					
137, 047	Barnum, D. and E. B., Brooklyn, N. Y. Tucker for sewing-machines.....	Mar. 25, 1873	633	209	3	326
	Barnum, E. B. (See Barnum, D. and E. B.)					
145, 325	Barnum, H. W., Omaha, Nebr. Apparatus for compressing cast metals in a liquid state.....	Dec. 9, 1873	264	88	4	619
	Barnum, R. (See Goodrich & Barnum.)					
135, 065	Barnum, R. S., assignor to H. C. Goodrich, Chicago, Ill. Tuck-creaser for sewing-machines.....	Jan. 21, 1873	532	172	3	78
142, 552	Barnum, R. S., and H. C. Goodrich, said Barnum assignor to said Goodrich, Chicago, Ill. Device for sharpening needles.....	Sept. 9, 1873	215	70	4	271
	Barr, J. H. (See Likes, M., assignor.)					
145, 480	Barr, R. J., Philadelphia, Pa. Steam-trap.....	Dec. 16, 1873	401	132	4	642
139, 105	Barr, W., Ypsilanti, Mich. Grater for cider-mills.....	May 20, 1873	581	182	3	568
140, 871	Barrett, E. and G. W., Fenimore, Tenn., assignors to W. H. Kirkpatrick, Franklin, Tenn.					
	Reciprocating churn.....	July 15, 1873	468	158	4	66
	Barrett, E. A. (See Walton & Barrett.)					
135, 066	Barrett, E. A., assignor to self and J. J. Walton, New York, N. Y. Pulley-block.....	Jan. 12, 1873	533	173	3	78
138, 225	Same..... Life-boat.....	Apr. 29, 1873	892	282	3	471
6, 682	Barrett, J., New York, N. Y., assignor to D. Powers & Sons, Lansingburgh, N. Y. Floor-cloth..... (Design).....	May 27, 1873			3	586
6, 683	Same..... Floor-cloth..... (Design).....	May 27, 1873			3	586
6, 810	Barrett, J., New York, N. Y., assignor to T. Potter, Sons & Co., Philadelphia, Pa. Oil-cloth..... (Design).....	Aug. 19, 1873			4	185
144, 497	Barrett, J. C., New Canaan, Conn., assignor of one-half interest to A. E. Cowl, Patterson, N. Y. Thill-coupling.....	Nov. 11, 1873	280	95	4	513
143, 217	Barrett, O. D., Washington, D. C. Wood-screw.....	Sept. 30, 1873	784	271	4	354
	Barrett, R. (See Codd, H., assignor.)					
139, 531	Barrett, T., New York, N. Y. Portable water-closet.....	June 3, 1873	74	25	3	615
	Barrett, W. A. (See Wilson, J. B., assignor.)					
140, 109	Barritt, C. L., Brooklyn, N. Y. Wardrobe-bedstead.....	June 24, 1873	634	199	3	691
145, 779	Barron, T., Black Oak, Mo. Apparatus for unloading corn from wagons.....	Dec. 23, 1873	677	221	4	676
135, 307	Barrows, H. G., Benton, Me. Potato-digger.....	Jan. 28, 1873	757	244	3	108
	Barrows, J. (See Brand, Barrows & Armstrong.)					
140, 608	Barry, C. S., Providence, R. I. Piston-packing.....	July 8, 1873	245	83	4	39
	Barry, S. (See Blair & Barry.)					
138, 468	Barry, S., and F. Perkins, Brunswick, Ohio. Wrench.....	May 6, 1873	4	1	3	498
138, 988	Barsalouse, J., and R. Graham, Kingsbury, assignors to G. A. Prescott, Sandy Hill, N. Y. Machine for extracting spikes.....	May 20, 1873	476	150	3	560
	Barsaloux, J. (See Prescott & Barsaloux.)					
135, 508	Barsaloux, J., and G. A. Prescott, Sandy Hill, N. Y. Slab and siding holder for saw-mills.....	Feb. 4, 1873	103	33	3	136
137, 996	Barstow, A. C., Providence, R. I. Cooking-stove.....	Apr. 22, 1873	661	209	3	445
144, 430	Barth, G. M., assignor to self and A. Sauer, Philadelphia, Pa. Window.....	Nov. 11, 1873	229	76	4	508
136, 204	Barth, H., Cincinnati, Ohio. Machine for planing stereotype-plates.....	Feb. 25, 1873	756	244	3	224

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
139, 229	Barth, H., Cincinnati, Ohio. Stop-cylinder printing-press	May 27, 1873	709	{ 223 224 }	3	586
139, 651	Barthel, A. E., assignor to self and A. B. Bary, Detroit, Mich. Tap and die	June 10, 1873	195	64	3	641
135, 879	Barthel, P., Frankfort-on-the-Main, Germany. Treating asphalt	Feb. 18, 1873	468	150	3	190
141, 027	Bartholf, J., Hillsborough, Wis. Tilting chair	July 22, 1873	633	213	4	88
137, 877	Bartholomew, S., Sturgis, Mich. Fishing-torch	Apr. 15, 1873	547	171	3	426
140, 238	Bartholomew, S. W., Louisburgh, N. C. Wash-boiler	June 24, 1873	740	234	3	700
136, 693	Bartle, W., Franklin, Pa. Combined tool	Mar. 11, 1873	312	103	3	279
141, 982	Bartle, W. S., Newark, N. Y. Rotary valve and cut-off	Aug. 19, 1873	523	173	4	195
137, 168	Bartle, W. S., and J. Garlock, Newark, N. Y. Feed-cutter	Mar. 25, 1873	740	246	3	334
145, 042	Bartlett, C., Providence, R. I. Dish-washer	Dec. 2, 1873	1	1	4	586
137, 338	Bartlett, D. L., assignor to Bartlett, Robbins & Co., Baltimore, Md. Expansion-bolt	Apr. 1, 1873	57	17	3	361
139, 106	Bartlett, D. L., Ogdensburgh, N. Y. Packing-box	May 20, 1873	582	182	3	568
145, 717	Bartlett, E. G. W., assignor to Providence Tool Company, Providence, R. I. Method of forming receivers for breech-blocks of fire-arms	Dec. 23, 1873	622	204	4	672
	Bartlett, G. E., <i>et al.</i> (See Rogers, I. R., assignor.)					
136, 578	Bartlett, J. (See Phelps, J. M., assignor.)					
141, 621	Bartlett, J. E., Boston, Mass. Dumping-scow	Mar. 11, 1873	219	73	3	272
134, 628	Same..... Heating-drum	Aug. 12, 1873	201	64	4	159
140, 239	Bartlett, J. J., New York, N. Y. Composition for forming stone, &c.	Jan. 7, 1873	120	.....	3	16
135, 961	Same..... Artificial stone	June 24, 1873	741	.....	3	700
139, 701	Bartlett, L., Yarmouth, Me. Fly-catcher	Feb. 18, 1873	531	175	3	195
	Bartlett, N. Bayonne City, N. J., assignor to self and S. C. West, Elizabeth, N. J. Manufacture of zinc-white	June 10, 1873	249	78	3	645
	Bartlett, Robbins & Co. (See Bartlett, D. L., assignor.)					
138, 469	Bartlett, W. E., assignor to the North British Rubber Company, (limited,) Edinburgh, North Britain. Traction-wheel	May 6, 1873	4	2	3	498
138, 989	Barton, C., Philadelphia, Pa. Station-indicator	May 20, 1873	477	{ 150 151 }	3	560
	Barton, E., <i>et al.</i> (See Getty, G. B., assignor.)					
140, 872	Barton, I., Williamsport, Pa. Steam-generator	July 15, 1873	469	159	4	66
138, 366	Barton, I. T., Union City, Mich. Machine for thrashing and hulling clover	Apr. 20, 1873	1, 021	{ 321 322 }	3	482
139, 355	Same..... Thrashing-machine	May 27, 1873	816	261	3	595
137, 122	Barton, R. T., New Haven, Conn. Brick-machine	Mar. 25, 1873	702	233	3	331
141, 620	Barton, S., jr., London, England. Distributing-apparatus for garden-hose, syringes, &c.	Aug. 12, 1873	201	63	4	159
145, 383	Barton, W. E., East Hampton, Conn. Lathe-chuck for sleigh-bells	Dec. 9, 1873	307	103	4	623
139, 999	Barwick, M. J., New York, N. Y. Fire-damper for windows	June 17, 1873	513	163	3	673
	Bary, A. B. (See Barthel, A. E., assignor.)					
137, 048	Bary, A. B., Detroit, Mich. Bobbin-winder for sewing-machines	Mar. 25, 1873	635	210	3	326
139, 652	Bass, D., jr., Woonsocket, R. I. Quill-bobbin for spinning-machines	June 10, 1873	196	64	3	641
	Bass, J. P. (See Bucknam, A. C., assignor.)					
140, 000	Bassett, E., assignor of one-half interest to A. P. Chapin, Topeka, Kans. Shirt-bosom stretcher	June 17, 1873	514	163	3	673
140, 758	Bassett, E., Topeka, Kans. Ironing-board	July 15, 1873	373	127	4	58
5, 586	Bassett, G., Syracuse, N. Y., assignor of one-half interest to T. G. Bassett. Concrete pavement	Oct. 7, 1873	142	47	4	392
138, 118	Bassett, J. W., New York, N. Y. Fire-proof ceiling and floor	Apr. 22, 1873	773	247	3	454
139, 356	Bassett, R. M., Birmingham, Conn. Puddlers' ball-roller	May 27, 1873	817	261	3	595
	Bassett, R. N. (See Chaffee, C. S., assignor.)					
	Bassett, T. G. (See Bassett, G., assignor.)					
135, 067	Bassford, A., Fort Wayne, Ind. Lemon-squeezer, &c.	Jan. 21, 1873	534	173	3	78
138, 602	Bastet, L., New York, N. Y. Galvanic battery	May 6, 1873	116	38	3	507
144, 248	Same..... Propelling canal-boats and other vessels	Nov. 4, 1873	70	22	4	483
	Bastine, A. J. (See Cross, J. R., assignor.)					
139, 532	Basye, H. T., Dyersburgh, Tenn. Bin for preserving sweet potatoes, &c.	June 3, 1873	75	25	3	615
140, 240	Same..... Potato-plow	June 24, 1873	742	234	3	700
136, 955	Bataille, A., New York, N. Y. Gridiron	Mar. 18, 1873	543	179	3	307
139, 533	Batchelder, A. R., Newburyport, Mass. Toy	June 3, 1873	76	26	3	615
136, 124	Batchelder, D. G., Salem, Mass. Machine for making sheet-lead	Feb. 25, 1873	689	223	3	219
138, 603	Batchelder, J. H. and S. J. Sargent, Lincoln, Vt. Wash-boiler	May 6, 1873	117	39	3	507
6, 741	Batcheller, F. S., Providence, R. I. Plaster cast	July 1, 1873	.....	.....	4	8
142, 192	Bate, W. H., Charlestown, Mass. Self-closing faucet	Aug. 26, 1873	729	240	4	221
141, 102	Bate, W. S., Philadelphia, Pa. Compound faucet	July 22, 1873	700	235	4	93
143, 317	Same..... Refrigerator building	Sept. 30, 1873	872	298	4	362
145, 609	Same..... Washstand-faucet	Dec. 16, 1873	517	169	4	651
137, 878	Bate, W. T., Norristown, Pa. Combined heater and filter	Apr. 15, 1873	548	171	3	426
137, 650	Bateman, J. S., Baltimore, Md. Refrigerator and water-cooler combined	Apr. 8, 1873	337	104	3	396
145, 326	Bates, A. E., Monroe, Mich. Composition for lining furnaces, crucibles, &c.	Dec. 9, 1873	265	.....	4	619
140, 806	Bates, C. E., South Deerfield, Mass. Tobacco-transplanter	July 15, 1873	414	140	4	61
	Bates, F. G. (See Rodier & Bates.)					
136, 019	Bates, F. G., Springfield, Mass., assignor to American Clutch Company, Middletown, Conn. Railway-car brake	Feb. 18, 1873	582	192	3	199
138, 555	Bates, F. L., Bremond, Tex. Cotton-cultivator	May 6, 1873	79	26	3	504
	Bates, G. (See Mansure, R., jr., assignor.)					
142, 073	Bates, G. G., New York, N. Y. Packing or show case	Aug. 26, 1873	630	207	4	213
140, 990	Bates, H. W., Allston, Mass. Carpet-cleaner	July 22, 1873	600	203	4	85
136, 638	Bates, J. C., Cold Spring, N. Y. Window-sash ventilator	Mar. 11, 1873	269	90	3	276
141, 254	Same..... same	July 29, 1873	859	281	4	114
134, 629	Bates, J. W., Minneapolis, Minn. Car-coupling	Jan. 7, 1873	120	39	3	16
142, 667	Bates, L. L., Boston, Mass. Fastener for the meeting rails of sashes	Sept. 9, 1873	312	104	4	279
135, 193	Bates, P., jr., Pittsburgh, Pa. Car-starter	Jan. 28, 1873	653	211	3	100
137, 283	Bates, S. D., Lewisburgh, and S. W. Murray, assignors to Murray, Dougall & Co., Milton, Pa. Screw-cutting die	Apr. 1, 1873	4	2	3	357
	Bates, T. L. (See Witsil, G. L., assignor.)					
145, 610	Bates, T. S., Boston, Mass. Copper-plate printing-press	Dec. 16, 1873	518	170	4	651
143, 116	Bates, W., Burslem, England. Covered vessel	Sept. 23, 1873	701	240	4	331
135, 258	Batty, J., Manchester, N. J. Meat-chopper	Jan. 28, 1873	720	230	3	105
5, 316	Batty, S. M., assignor to W. K. Miller, Canton, Ohio. Harvester	Mar. 11, 1873	403	134	3	287
137, 879	Batwell, E., Ypsilanti, Mich. Horse-collar	Apr. 15, 1873	549	171	3	426
143, 400	Batzel, E., Philadelphia, Pa. Hose-bridge	Oct. 7, 1873	3	1	4	381
142, 760	Baudvin, A. E. P., Paris, France. Alloy to resemble silver	Sept. 16, 1873	402	.....	4	297
136, 579	Bauer, C. A., Hamilton, Ohio. Lathe-rest	Mar. 11, 1873	220	73	3	272
136, 205	Bauer, J., assignor to C. M. and J. H. Theberath, Newark, N. J. Gig saddle-tree	Feb. 25, 1873	757	244	3	224
137, 404	Bauer, L., San Francisco, Cal. Channeling and edging tool	Apr. 1, 1873	110	36	3	366

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Baugh, A. M. (See Held & Baugh.)					
	Baugh, J. (See Brayton & Baugh.)					
5, 217	Baughman, D. C., Tiffin, Ohio. Thrashing-machine..... (Reissue)..	Jan. 7, 1873	206	67	3	23
135, 962	Baughman, H., Dorn's Gold Mines, S. C. Saw-gummer.....	Feb. 18, 1873	531	175	3	195
145, 327	Same..... Saw-gumming machine.....	Dec. 9, 1873	265	89	4	619
136, 956	Baughman, J., and B. R. Chalk, Mount Washington, Md. Chair.....	Mar. 18, 1873	543	179	3	307
	Baughman, S. S. (See Strasser, W., assignor.)					
139, 357	Baumann, A., London, England. Piston-valve for steam-engines.....	May 27, 1873	817	261	3	595
135, 308	Baumann, F. F., Cambridge, Mass. Shoemaker's edge-plane.....	Jan. 28, 1873	758	245	3	109
141, 622	Baumann, H. W., Memphis, Tenn. Baling-press.....	Aug. 12, 1873	202	64	4	159
145, 328	Baumgartner, F., Brooklyn, N. Y. Carriage-curtain fastener.....	Dec. 9, 1873	266	89	4	619
145, 384	Baxendale, S., Boston, Mass. Lubricating packing for journals, shafting, &c.....	Dec. 9, 1873	303	.....	4	623
	Baxter, G. H., et al. (See Morrill, J. A., assignor.)					
6, 340	Baxter, I. J., Peekskill, N. Y. Heating-stove..... (Design).....	Jan. 14, 1873	.....	.....	3	38
139, 757	Baxter, J. C., Washington, D. C. Manufacture of wine.....	June 10, 1873	301	93	3	649
138, 311	Baxter, J. T., Finksburgh, assignor of one-half interest to W. A. McKellip, Westminster, Md. Car-replacer.....	Apr. 29, 1873	977	307	3	478
139, 039	Baxter, J. W., Vevay, Ind. Dental drill.....	May 20, 1873	519	164	3	563
134, 968	Baxter, T. W., Chicago, Ill. Method of setting black diamonds.....	Jan. 21, 1873	142	142	3	71
137, 527	Baxter, W. D., assignor to Sands & Baxter, New York, N. Y. Pump.....	Apr. 8, 1873	234	71	3	387
136, 957	Bayard, E., and B. A. Mason, New York, N. Y. Glass-furnace.....	Mar. 18, 1873	544	179	3	307
	Bayer, C. J. (See Olds, H. D., assignor.)					
138, 840	Bayles, A. G., and J. W. H. Canoll, New York, and G. D. Miner, Williamsburgh, N. Y. Folding bedstead.....	May 13, 1873	344	106	3	536
	Bayley, C. E. (See McKay, W., assignor.)					
	Baylie, T. S. (See Foster, Baylie & Harbin.)					
	Bayliss, E., et al. (See Hodges, P. F., assignor.)					
134, 507	Bayliss, E., Massillon, Ohio. Stump-extractor.....	Jan. 7, 1873	4	2	3	8
143, 609	Bayliss, E., J. O. Brown, and F. T. Lomont, assignors to selves and P. F. Hodges, Massillon, Ohio. Harvesting-machine.....	Oct. 14, 1873	196	66	4	405
	Bay State Suspender Company. (See Potter & Smith, assignors)..... (Reissue.)					
	Bazan, F. (See Mégy, De Echeverria & Bazan.)					
143, 269	Bazin, E., Paris, France. Dredging-apparatus.....	Sept. 30, 1873	831	{ 285 } { 286 }	4	358
139, 534	Bazin, J. A., Canton, Mass. Folding stereoscope.....	June 3, 1873	76	25	3	615
	Bazzoni, L. J. (See Brown, G. B., assignor.)					
	Beach, E. (See Read, H. F., assignor.)					
6, 971	Beach, E. R., Philadelphia, Pa. Gas-burner..... (Design).....	Nov. 4, 1873	.....	.....	4	478
145, 084	Beach, H. L., assignor to Beach Wheel Horse-Rake Manufacturing Company, New York, N. Y. Scroll-saw.....	Dec. 2, 1873	43	13	4	589
	Beach Patent Shifting Carriage-Seat Manufacturing Company. (See Beach, S. W., assignor)..... (Reissue.)					
145, 481	Beach, R. C., and G. A. Berry, Tidioute, Pa. Window-blind slat-adjuster.....	Dec. 16, 1873	402	132	4	642
5, 262	Beach, S. W., Ypsilanti, Mich., assignor to Beach Patent Shifting Carriage-Seat Manufacturing Company. Clamping movable seats for carriages. (Reissue.)	Jan. 28, 1873	848	273	3	116
5, 272	Same..... Whip-socket..... (Reissue).....	Feb. 11, 1873	445	145	3	174
137, 123	Beach, T., assignor of one-half interest to J. C. McClelland, Freeport, Pa. Air-pump and engine.....	Mar. 25, 1873	703	233	3	331
138, 841	Beach, T. S., New York, N. Y. Explosive compound.....	May 13, 1873	345	.....	3	536
135, 509	Beach, W. H., and C. N. Hanson, assignors to selves, H. F. White, and W. W. Smith, Hamburg, Iowa. Earth-auger.....	Feb. 4, 1873	104	33	3	136
135, 510	Same..... Means for operating earth-augers.....	Feb. 4, 1873	105	33, 34	3	136
	Beach Wheel Horse-Rake Manufacturing Company. (See Beach, H. L., assignor.)					
6, 617	Beagle, H., jr., Philadelphia, Pa. Hames-top..... (Design).....	Apr. 29, 1873	.....	.....	3	471
143, 318	Beals, J. C., Searsport, Me. Marine drag.....	Sept. 30, 1873	873	299	4	362
	Beals, J. M. (See Robertson, A. S., assignor.)					
140, 807	Beam, J. A., California, Mo. Egg-carrier.....	July 15, 1873	415	140	4	61
135, 620	Beamisdarfer, J., sr., Campbellstown, Pa. Railway-gates.....	Feb. 11, 1873	224	70	3	157
143, 657	Bean, B. F., Pawling, Pa. Mail-pouch holder and catcher for railways.....	Oct. 14, 1873	236	80	4	408
	Bean, D. (See Wheeldon, W. A., assignor.)					
5, 423	Bean, E. E., Abington, assignor by mesne assignment to the Shoe-Machinery Manufacturing Company, Boston, Mass. Wax-thread sewing-machine..... (Reissue).....	May 27, 1873	903	291	3	602
134, 508	Bean, E. E., Boston, Mass. Wax-thread sewing-machine.....	Jan. 7, 1873	6	2	3	8
134, 509	Bean, E. E., Boston, and F. Bean, Medford, assignors to Consolidated Wax-Thread Sewing Company, Boston, Mass. Wax-thread sewing-machine.....	Jan. 7, 1873	7	3	3	8
137, 528	Bean, E. E., Boston, and F. Bean, Medford, Mass. Wax-thread sewing-machine.....	Apr. 8, 1873	235	72	3	387
	Bean, F. (See Bean, E. E. and F.)					
5, 427	Bean, J. H., assignor to F. W. Brown, Cincinnati, Ohio. Tucker for sewing-machines. (Reissue.)	May 27, 1873	908	292	3	602
136, 896	Bean, J. H., Cincinnati, Ohio. Shank-laster for shoemakers.....	Mar. 18, 1873	494	164	3	303
140, 397	Same..... Blower for gas-engines.....	July 1, 1873	51	18	4	12
141, 255	Same..... Lasting-tool.....	July 29, 1873	860	281	4	114
141, 623	Same..... Tucker for sewing-machines.....	Aug. 12, 1873	203	64	4	159
141, 624	Same..... Magazine fire-arm.....	Aug. 12, 1873	204	64	4	160
145, 482	Same..... Tucker for sewing-machines.....	Dec. 16, 1873	403	132	4	642
140, 671	Bean, J. H., Macon, Ill. Horse hay-rake.....	July 8, 1873	294	99	4	43
142, 836	Same..... Apparatus for elevating and loading hay.....	Sept. 16, 1873	462	157	4	302
136, 580	Bean, J. M., Watertown, Mass. Elevator.....	Mar. 11, 1873	220	73, 74	3	272
145, 385	Bean, R. E., Franklin, N. H. Game-apparatus.....	Dec. 9, 1873	308	104	4	623
136, 482	Bean, S. L., and L. Mills, Galesburgh, Ill., assignors to Brown, Harris & Hopkins, New York, N. Y. Door and gate spring.....	Mar. 4, 1873	112	37	3	254
140, 873	Beard, E. J., Saint Louis, Mo. Band or hoop-tie for cotton-bales.....	July 15, 1873	470	159	4	66
143, 319	Beard, G. N., Saint Louis, Mo. Cotton-bale tie.....	Sept. 30, 1873	874	299	4	362
145, 273	Same..... same.....	Dec. 9, 1873	216	74	4	615
136, 125	Beard, M. M., Canton, Miss. Wash-boiler.....	Feb. 25, 1873	690	223	3	219
	Beard, W. L. (See Rosin, H. C., assignor.)					
142, 430	Beardsley, C. T., assignor to self and G. O. Catlin, Ansonia, Conn. Needle-threader for sewing-machines.....	Sept. 2, 1873	94	31	4	250
	Beardsley, J. H., et al. (See Clark & Lilliendahl, assignors.)					
136, 299	Bearse, I. M., Boston, Mass. Deck-light.....	Feb. 25, 1873	840	272	3	231
135, 259	Bearsley, J., assignor to Tapley Heel-Burnishing Association, Lynn, Mass. Method of burnishing boot and shoe heels by machinery.....	Jan. 28, 1873	721	230	3	105
141, 983	Bearsley, J., and J., jr., assignors of one-half interest to G. W. Keene, Lynn, Mass. Machinery for burnishing the sole-edges of boots and shoes.....	Aug. 19, 1873	524	173	4	195
141, 984	Same..... same.....	Aug. 19, 1873	525	174	4	195

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 842	Beattie, J. H. B., <i>et al.</i> (See Hemenway, C. V., assignor.)	May 13, 1873	346	107	3	536
144, 014	Beatty, C., Elizabeth, N. J. Extension settee.....	Oct. 28, 1873	599	198	4	457
143, 556	Beatty, G. F., Boston, Mass. Railway-switch.....					
139, 107	Beatty, W. E. (See Schultz, F. W., assignor.)					
142, 193	Beaudry, J., Montreal, Canada. Tailor's measure.....	Oct. 14, 1873	152	51	4	401
137, 049	Beaulien, L., Woonsocket, R. I. Washing-machine.....	May 20, 1873	583	183	3	568
141, 750	Beaumont, W., Philadelphia, Pa. Gas-retort..... (Extension)	June 28, 1873			3	690
134, 630	Beauregard, N., San Francisco, Cal. Bolt and rivet machine.....	Aug. 26, 1873	730	241	4	221
144, 431	Beaver, P. H., Montandon, Pa. Collar-pad.....	Mar. 25, 1873	636	210	3	326
136, 808	Becher, G. F., Brooklyn, N. Y. Portable fence.....	Aug. 12, 1873	309	101	4	168
141, 196	Bechler, J. A., Philadelphia, Pa. Child's carriage.....	Jan. 7, 1873	121	39, 40	3	16
144, 052	Beck, C., assignor to Gorham Manufacturing Company, Providence, R. I. Jewel-case.....	Nov. 11, 1873	229	77	4	508
138, 782	Beck, H., assignor to self and U. Kreid, Detroit, Mich. Hospital-canteen.....	Mar. 18, 1873	423	140	3	298
141, 196	Beck, M., and C. Schneidt, Philadelphia, Pa. Boot-brushing apparatus.....	July 29, 1873	799	261	4	109
140, 398	Beckenbaugh, J. P., Springfield, Ill. Draught-equalizer.....	Oct. 28, 1873	629	207	4	460
139, 108	Becker, A., Peotone, Ill. Wash-boiler.....	July 1, 1873	51	18	4	12
135, 755	Becker, E. J. M., New York, N. Y. Centrifugal-machine.....	May 20, 1873	583	183	3	568
142, 668	Becker, P., Philadelphia, Pa. Saddle-tree.....	Feb. 11, 1873	341	109	3	166
138, 604	Beckett, J. R., assignor to self and C. B. Payson, Cushing, Me. Street-railway.....	Sept. 9, 1873	313	104	4	279
135, 880	Beckley, J., Stiles, Iowa. Churn.....	May 6, 1873	118	39	3	507
143, 320	Beckmann, J., and J. Gibson, Cincinnati, Ohio. Stove-pipe-elbow machine.....	Feb. 18, 1873	469	151	3	190
138, 782	Beckwith, J. F., Albion, N. Y. Stove-pipe shelf.....	Sept. 30, 1873	875	299	4	362
135, 621	Beckwith, L. H., Port Jervis, N. Y. Safety-hook for filing papers.....	May 13, 1873	291	89	3	531
135, 963	Beckwith, P. D., Dowagiac, Mich. Heating-stove.....	Feb. 11, 1873	225	71	3	157
139, 492	Beckwith, R. E., Nashua, N. H. Sash-fastener.....	Feb. 18, 1873	532	175	3	195
5, 575	Beckwith, S. V., Brooklyn, N. Y., assignor to self and T. B. Carpenter, New Haven, Conn. Currency and postage-stamp holder.....	June 3, 1873	45	14	3	612
138, 605	Bedell, O. T., New York, N. Y., assignor by mesne assignment to W. D. Taber, P. P. Josef, and E. Striber. Egg-carrier..... (Reissue)	Sept. 23, 1873	778	268	4	338
141, 103	Bedell, S. D., New York, N. Y. Fruit-basket.....	May 6, 1873	118	39	3	507
139, 040	Bedessem, M. (See Boesen & Bedessem.)					
134, 631	Beddow, T., and A. T. Jackson, New Albany, Ind. Car-coupling.....	July 22, 1873	701	235	4	94
136, 406	Beebe, C. V. (See Beebe, J. M., assignor.)					
145, 043	Beebe, E. W., Evansville, Wis. Sewing-machine.....	May 20, 1873	519	164	3	563
139, 855	Beebe, H., Jersey City Heights, N. J. Lantern.....	Jan. 7, 1873	123	40	3	16
141, 625	Beebe, J. M., assignor to self and C. V. Beebe, Cassadaga, N. Y. Fence-post.....	Mar. 4, 1873	47	17	3	249
136, 020	Beecher, C. T., Bethany, Conn. Harness whiffletree.....	Dec. 2, 1873	1	1	4	586
143, 270	Beecher, H. M., Plantsville, assignor to Beecher Manufacturing Company, West Meriden, Conn. Clip king-bolt and plate.....	June 17, 1873	392	122	3	663
144, 883	Beecher Manufacturing Company. (See Beecher, H. M., assignor.)					
142, 982	Beecroft, N. D., Bangor, Me. Hoe.....	Feb. 18, 1873	583	192	3	199
142, 983	Beekman, A., New York, N. Y. Propelling boats.....	Sept. 30, 1873	832	286	4	350
145, 611	Beekman, J. V., assignor to self and J. A. Lighthall, Brooklyn, N. Y. Rotary steam-engine.....	Nov. 25, 1873	627	213	4	593
	Same.....Feed-water heater.....	Sept. 23, 1873	591	201	4	323
		Sept. 23, 1873	592	201	4	323
		Dec. 16, 1873	520	170, 171	4	652
	Beelman, J. H. (See Snyder, U. C., assignor.)					
	Beer, C. (See Bockstaller, G., assignor.)					
	Beerbrower, S. D. (See Thompson & Beerbrower.)					
137, 405	Beers, G. W., Bridgeport, Conn. Curtain-fixture.....	Apr. 1, 1873	111	36	3	366
144, 182	Beers, J. B., San Francisco, Cal. Artificial crowns for teeth.....	Nov. 4, 1873	5	2	4	479
143, 610	Beery, S., Urbana, Ohio, and J. W. McDonald, Houston, Tex. Policeman's baton.....	Oct. 14, 1873	197	66	4	405
6, 697	Beesley, J., assignor to S. Smith, Philadelphia, Pa. Heating-stove..... (Design)	June 3, 1873			3	608
134, 838	Beesley, T., Muscatine, Iowa. Balanced slide-valve.....	Jan. 14, 1873	320	102	3	46
137, 756	Begbie, J., Philadelphia, Pa. Saw-set.....	Apr. 15, 1873	444	138	3	417
141, 197	Beggs, C. C. & Co. (See Cole, L., assignor.)					
135, 964	Beggs, J., Chicago, Ill. Steam hoisting-apparatus.....	July 29, 1873	800	262	4	109
139, 535	Behel, J. (See Richardson & Behel.)					
6, 967	Behel, J., Rockford, Ill, assignor to self and G. R. Richardson, Earlville, Ill. Cultivator.....	Feb. 18, 1873	533	176	3	195
134, 581	Behel, J., Rockford, Ill. Manufacture of cultivator-teeth.....	June 3, 1873	77	26	3	615
134, 582	Beiderhase, B. D., New York, N. Y. Handle of spoons, forks, &c..... (Design)	Oct. 28, 1873			4	452
144, 053	Beiderhase, B. D., and C. Witteck, New York, N. Y. Device for producing pearl-finish on metallic surfaces.....	Jan. 7, 1873	78	25	3	13
145, 329	Beissel, S., Shamokin, Pa. Meat-holder..... (Extension)	Dec. 9, 1873	267	89	4	619
145, 832	Belcher, W., administrator. (See Allender, J.)					
136, 357	Belden, J. C., <i>et al.</i> (See Hart, J., assignor)					
	Bélégue, E. C., Paris, France. Ship's hull.....	Dec. 23, 1873	718	236	4	680
	Belford, I., Caldwell, Ohio. Hand-rest.....	Mar. 4, 1873	4	1	3	245
	Belford, S. (See Hardenbrook & Belford)					
	Belknap and Burnham Manufacturing Company. (See Laws, A. D., assignor.)					
143, 117	Belknap, J., Adrian, Mich. Violin.....	Sept. 28, 1873	701	240	4	331
137, 406	Belknap, J. O., Mobile, Ala. Revolving attachment for gas-burners.....	Apr. 1, 1873	112	37	3	366
138, 843	Belknap, J. O., Mobile, Ala. Reflector.....	May 13, 1873	347	107	3	536
134, 839	Bell, A. H., Cedar Falls, Iowa. Bed-bottom.....	Jan. 14, 1873	321	102	3	46
143, 658	Same.....Bag-holder weighing-scales.....	Oct. 14, 1873	238	80	4	408
135, 310	Bell, C. S., <i>et al.</i> (See Slusser, G., assignor.)					
140, 180	Bell, F. G., New York, assignor to S. E. Cox, Haverstraw, N. Y. Leather-dressing compounds.....	Jan. 28, 1873	760		3	109
134, 632	Bell, J. D., Wattsborough, Va. Broom.....	June 24, 1873	696	218	3	696
138, 312	Bell, N. and H., Winfield, Pantego Township, N. C. Cotton cultivator.....	Jan. 7, 1873	124	40	3	16
141, 417	Bell, T., Bellport, N. Y. Water-elevator.....	Apr. 29, 1873	978	307	3	478
139, 230	Bell, T., and J. F. Hillerick, Louisville, Ky. Idler for belt-gearing.....	Aug. 5, 1873	6	2	4	135
145, 833	Bell, T. G., Brooklyn, N. Y. Thimble for ship's rigging.....	May 27, 1873	714	225	3	586
134, 723	Bell, T. G., Brooklyn, N. Y., assignor to J. J. Walton, New York, N. Y. Rigging-stopper.....	Dec. 23, 1873	718	236	4	680
135, 309	Bell, T. M., New York, N. Y. Metallic bottom for milk-cans.....	Jan. 14, 1873	222	71	3	38
	Bell, V., Minneapolis, Minn. Barrel-truck.....	Jan. 28, 1873	759	245	3	109
	Bell, W. O., <i>et al.</i> (See Pease, J., assignor.)					
144, 727	Bellairs, W. and W. Ough, Atkinson, Ill. Tire-tightener.....	Nov. 18, 1873	483	164	4	540
141, 104	Bellemere, A. (See Frontier & Bellemere.)					
141, 536	Bellemere, J. F., and F. R. Fleer, Reading, Pa. Gauge-cock.....	July 22, 1873	702	235	4	94
	Same.....Sleeve or patch for stopping leaks in hose.....	Aug. 5, 1873	109	34	4	144

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 498	Bellido, F. D., New York, N. Y. Automatic water-meter	Nov. 11, 1873	281	95	4	513
	Bellinger, E., Ilion, N. Y. Composition for kindling fire	Dec. 13, 1873			4	614
138, 119	Bellis, W., Indianapolis, Ind. Shaft-hanger	Apr. 22, 1873	774	247	3	454
142, 761	Bellows, S. H., Middletown, Conn. Machinist's gauge	Sept. 16, 1873	402	136	4	297
	Belmont Glass Works. (See Hobbs, J., assignor)					
136, 958	Beman, W. E., assignor of two-thirds interest to M. Sampson, Portland, Me. Car-coupling	Mar. 18, 1873	544	180	3	307
137, 407	Bement, W. B., Philadelphia, Pa. Feeding-device for punching-machines	Apr. 1, 1873	113	37	3	366
	Bemis, F. (See Crossman, C. P., assignor.)					
145, 085	Bemis, W. C., Springfield, Mass. Wrench	Dec. 2, 1873	44	14	4	589
138, 313	Benda, J., Yatton, Iowa. Medical compound or liniment	Apr. 29, 1873	979		3	478
141, 310	Bender, C., New York, N. Y., C. H. Latrobe, Baltimore, Md., and C. S. Smith, Saint Louis, Mo. Iron bridge	July 29, 1873	906	297	4	118
	Bender, H. F. W. (See Lorenz & Bender.)					
138, 367	Benecke, L., Brunswick, Mo. Bracket	Apr. 29, 1873	1,022	322	3	482
	Benedict and Burnham Manufacturing Company. (See Hallas & Weeden, assignors.)					
140, 571	Benedict, H., Philadelphia, Pa. Bed-bottom	July 8, 1873	212	71	4	37
	Benedict, I. (See Wright & Benedict.)					
141, 105	Benjamin, A., Newark, N. J. Hardening steel wire and thin sheets of steel	July 22, 1873	703		4	94
137, 284	Benjamin, E., assignor of half interest to S. W. Pease, Chicago, Ill. Sawing-machine	Apr. 1, 1873	5	2	3	357
142, 669	Benjamin, E., assignor to self and S. W. Pease, Chicago, Ill. Cutter-head	Sept. 9, 1873	314	104	4	279
	Benjamin, G. T. (See De Silva & Benjamin.)					
144, 824	Benjamin, O. D., Toledo, Ohio. Billiard-cue clamp	Nov. 25, 1873	576	196	4	558
142, 762	Benckendorff, F., Brooklyn, N. Y. Sewing-case	Sept. 16, 1873	403	136	4	297
	Benneckendorf, A. (See Brunjes & Benneckendorf.)					
	Benner, J. (See Kitson & Benner.)					
134, 840	Benner, L. D., assignor to self and Northend & Foster, Boston, Mass. Car-starter	Jan. 14, 1873	321	103	3	46
137, 880	Benner, L. D., Boston, Mass. Whip-socket	Apr. 15, 1873	549	172	3	426
138, 844	Benner, L. D., Boston, Mass., assignor to Union Paper-Bag Company, Pennsylvania. Paper-bag machine	May 13, 1873	347	107 108	3	536
143, 321	Benner, L. D., Boston, Mass. Paper bag	Sept. 30, 1873	875	299	4	362
	Benner, S. T., et al. (See Brandeis, S., assignor.)					
	Bennett, E. K., et al. (See Powell, A. H., assignor.)					
	Bennett, D., et al. (See McPherson, W. H., assignor.)					
138, 368	Bennett, D., Baldwin Township, and M. Krebs and J. Haley, assignors to the Crystal Glass Company, Pittsburgh, Pa. Glass-mold carriage	Apr. 29, 1873	1,023	322	3	482
	Bennett, E. R. (See Wood, J., assignor)					
136, 206	Bennett, G. W., Smithville, Ind. Apple-parer, corer, &c	Feb. 25, 1873	757	245	3	224
143, 869	Bennett, J., El Paso, Ill. Washing-machine	Oct. 21, 1873	450	150	4	435
135, 311	Bennett, J. B., Brooklyn, N. Y. Rotary steam-engine	Jan. 28, 1873	760	245	3	109
	Bennett, J. G., et al. (See Davies, H. J., assignor.)					
138, 990	Bennett, J. M. C., assignor to self and W. C. Bennett, Ovid, Mich. Metallic sweat and collar pad	May 20, 1873	478	151	3	560
142, 142	Bennett, L. D., Willimantic, Conn. Car-coupling	Aug. 26, 1873	690	227	4	218
135, 260	Bennett, M. J., Braddocks, Pa. Molasses jug or pitcher	Jan. 28, 1873	722	231	3	105
140, 808	Bennett, S., New Orleans, La. Water-elevator	July 15, 1873	415	141	4	61
	Bennett, T. (See Miller & Bennett.)					
	Bennett, W. C. (See Bennett, J. M. C., assignor.)					
142, 194	Bennett, W. W., Jersey City, N. J. Piano-forte	Aug. 26, 1873	731	241	4	221
	Bennor, J. (See McLean & Bennor.)					
5, 667	Bennor, J., assignor by mesne assignment to N. D. Stoops and J. B. Myers, Philadelphia, Pa. Extension-table for sewing-machines	Nov. 25, 1873	761	257	4	574
136, 959	Bennor, J., Philadelphia, Pa., assignor of half interest to J. N. McLean. Extension-table for sewing-machines	Mar. 18, 1873	545	180	3	307
140, 874	Bennor, J., assignor to N. D. Stoops and J. B. Myers, Philadelphia, Pa. Sewing-machine table	July 15, 1873	470	159	4	66
140, 875	Same.....Sewing-machine table	July 15, 1873	471	159	4	66
140, 876	Same.....same	July 15, 1873	472	160	4	66
140, 877	Same.....Extension-table for sewing-machines	July 15, 1873	472	160	4	66
141, 985	Same.....Sewing-machine table	Aug. 19, 1873	526	174	4	195
143, 742	Same.....same	Oct. 21, 1873	342	114	4	426
145, 612	Same.....same	Dec. 16, 1873	521	171	4	652
138, 120	Benseman, W., and E. Slocum, Washington, D. C. Machine for affixing stamps to letters	Apr. 22, 1873	775	247	3	454
	Benson, J. (See Benson, S. & J.)					
136, 021	Benson, J., and A. H. Watkins, Boston, Mass. Vapor-burner	Feb. 18, 1873	584	192	3	199
136, 022	Same.....same	Feb. 18, 1873	585	192	3	199
	Benson, L. L., et al. (See Williams, H. B., assignor.)					
137, 651	Benson, S. and J., Centralia, Ill. Steam-injector	Apr. 8, 1873	338	105	3	396
140, 878	Benson, W. H., Waynesborough, Va. Device for transferring motion	July 15, 1873	473	160	4	66
139, 653	Bentley, J. H., Cambridge, Mass. Paper-file box	June 10, 1873	196	64	3	641
142, 074	Benton, J. F., Penn Yan, N. Y. Plow	Aug. 26, 1873	630	207	4	213
145, 981	Bentz, J., Parkersburgh, W. Va. Steam-cooker	Dec. 30, 1873	875	284	4	703
	Berger, A. (See Jacobsen & Berger.)					
144, 183	Berghausen, B., and A. L. Kiesling, Cologne, Germany. Railway-car heater	Nov. 4, 1873	6	2	4	479
135, 622	Bergner, G., Washington, Mo. Apple-parer	Feb. 11, 1873	226	71	3	157
140, 001	Bergstresser, E. L., Hublersburgh, Pa. Photography	June 17, 1873	514	163	3	673
145, 330	Bergtold, L., Buffalo, N. Y. Muff-stand	Dec. 9, 1873	268	90	4	619
145, 146	Bering, J. E., Newburgh, N. Y. Car-axle box	Dec. 2, 1873	100	33	4	593
145, 834	Same.....Car-axle lubricator	Dec. 23, 1873	719	236	4	680
134, 583	Berkey, D., Huntington, Ind. Vapor-stove for heating soldering-irons	Jan. 7, 1873	79	25	3	13
	Bernard, W. M. (See Coffee & Bernard.)					
141, 028	Berndt, B., assignor to Riley & Maitland, Williamsport, Pa. Saw-mill	July 22, 1873	634	213	4	88
	Berner, English & Over. (See King, J., assignor.)					
136, 960	Berney, A., Jersey City, N. J. Process for using anthracite-coal dust or slack as fuel in locomotive-boilers	Mar. 18, 1873	545		3	307
137, 820	Same.....Process of using anthracite coal-dust as fuel in furnaces	Apr. 15, 1873	501		3	422
139, 288	Same.....Artificial fuel and methods of burning the same	May 27, 1873	766		3	590
142, 609	Berns, L., Middletown, N. Y. Lamp	Sept. 9, 1873	263	86	4	275
	Berry, G. A. (See Beach & Berry.)					
144, 432	Berry, G. E., and F. C. Pingree, Detroit, Mich. Automatic hatchway-guard	Nov. 11, 1873	230	77	4	509
142, 553	Berry, J. I., Williamsport, Pa. Shook-holder	Sept. 9, 1873	216	70	4	271
	Berry, L. H. (See Richards & Berry.)					
135, 261	Berry, S., New York, N. Y. Washing-machine	Jan. 28, 1873	722	231	3	105
142, 984	Berry, W. J., Brooklyn, N. Y. Lantern	Sept. 23, 1873	592	201	4	323

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Berryman, B. A. (<i>See Wakefield & Berryman.</i>)					
135, 068	Berryman, B. A., Saint Louis, Mo. Carriage-axle and axle-box	Jan. 21, 1873	534	173	3	78
137, 881	Berryman, B. A., and A. B. Wakefield, Saint Louis, Mo. Hose-pipe nozzle	Apr. 15, 1873	550	172	3	426
135, 756	Berryman, R., Hartford, Conn. Feed-water heater and condenser	Feb. 11, 1873	341	109	3	166
135, 757	Same.....Feed-water apparatus for steam-boilers	Feb. 11, 1873	342	110	3	166
135, 758	Same.....Steam-radiator	Feb. 11, 1873	343	110	3	166
139, 758	Bertetson, A., West Salem, Wis. Hulling-machine	June 10, 1873	301	93	3	649
145, 613	Berthet, A., and P. Laberie, assignors of one-fourth interest to D. P. White, New Orleans, La. Fiber-disintegrator	Dec. 16, 1873	522	171	4	652
142, 892	Bertonniere, L. M. F., assignor to self and E. Croissant, Laval, France. Producing coloring matter from vegetable substances	Sept. 16, 1873	506	.....	4	305
136, 407	Beschke, W., assignor of one-half interest to S. Sellers, Philadelphia, Pa. Construction of buildings	Mar. 4, 1873	47	17	3	249
	Betteley, A., Boston, Mass. Elevator for warehouses, factories, mines, &c. (Extension)	Aug. 2, 1873	.....	.....	4	85
143, 659	Bettsworth, A. P., Carlinville, Ill. Pruning-implement	Oct. 14, 1873	238	80	4	408
	Bettes, A. (<i>See Graham, J. F., assignor.</i>)					
144, 593	Bettesworth, G. W., Cedar Rapids, Iowa. Numerical filing-case	Nov. 18, 1873	371	125	4	531
144, 499	Betts, A., assignor to E. and A. Betts, Wilmington, Del. Device for changing the speed of machinery	Nov. 11, 1873	283	96	4	513
	Betts, E., <i>et al.</i> (<i>See Betts, A., assignor.</i>)					
141, 913	Betts, G. W., Shadeville, Ohio. Land-marker	Aug. 19, 1873	472	155	4	100
141, 311	Betts, L. F., Philadelphia, Pa. Lantern	July 29, 1873	908	298	4	118
6, 791	Betts, R. W., assignor to self and O. P. Dorman, New York, N. Y. Collar-box. (Design)	Aug. 5, 1873	.....	.....	4	135
135, 312	Bevelander, B., Boston, Mass. Nail-separating machine	Jan. 28, 1873	761	{ 245 246 }	3	109
138, 783	Same.....Machine for assorting nails	May 13, 1873	292	90	3	531
137, 997	Beven, T., Loughborough, assignor to J. Mundella, Nottingham, England. Machine for uniting the selvages of knit fabrics	Apr. 22, 1873	662	{ 209 110 }	3	445
139, 856	Bex, T. H., Syracuse, N. Y. Instrument for administering balls to animals	June 17, 1873	392	123	3	663
142, 985	Bibb, B. C. (<i>See Klotz, P., assignor.</i>)					
135, 069	Bibb, W. C., Madison, Ga. Insect-destroying compound	Sept. 23, 1873	593	.....	4	323
141, 312	Bickel, H., Myerstown, Pa. Wash-boiler attachment	Jan. 21, 1873	535	173	3	78
136, 639	Bickell, E., Milton, Pa. Car-coupling	July 29, 1873	908	298	4	118
130, 207	Bickford, D., New York, N. Y. Knit fabrics and methods of knitting them	Mar. 11, 1873	269	90	3	276
139, 857	Bickford, H., assignor to L. Fagin, trustee, Cincinnati, Ohio. Scroll-saw	Feb. 25, 1873	758	245	3	224
145, 044	Bickings, L. C., Norristown, Pa. Thrashing-machine	June 17, 1873	393	123	3	663
	Same.....Concave for thrashing-machine	Dec. 2, 1873	2	1	4	586
	Bicknell, E. J., <i>et al.</i> (<i>See Ralston, J., assignor.</i>)					
	Biddle Manufacturing Company. (<i>See Baker, W., assignor.</i>)					
	Same.....(<i>See Lyon, W., assignor.</i>)					
134, 783	Bidwell, J. A., and W. Chisholm, Cleveland, Ohio. Wood screw	Jan. 14, 1873	270	88	3	42
140, 342	Biedinger, N., Cincinnati, Ohio. Bag machine	July 1, 1873	7	2	4	8
139, 289	Bierbower, J., assignor of one-half interest to A. Kauffman, Philadelphia, Pa. Dust-conveying attachments for thrashing-machines	May 27, 1873	768	243	3	590
140, 453	Biersdorf, J., Chicago, Ill. Sofa-bedstead	July 1, 1873	92	31	4	16
136, 023	Bigelow, A., Killingworth, Conn. Lemon-squeezer	Feb. 18, 1873	586	193	3	199
	Bigelow, G. B., trustee. (<i>See Duchemin, W., assignor.</i>)					
144, 945	Bigelow, G. W., New Haven, Conn. Dynamometer	Nov. 25, 1873	674	229	4	567
	Bigelow, L. A., trustee. (<i>See McCracken, E. D., assignor.</i>)					
	Bigelow, L. A., administrator. (<i>See Tufts, O.</i>) (Disclaimer.)					
	Same.....same. (Extension.)					
138, 470	Bigelow, L. C. (<i>See Bigelow, S., and L. C.</i>)					
6, 538	Bigelow, S., Newburgh, and L. C. Bigelow, Kirtland, Ohio. Potato-digger	May 6, 1873	5	2	3	498
135, 686	Bigelow, W. P., Natick, Mass. Music-stand (Design)	Apr. 1, 1873	.....	.....	3	356
143, 557	Bigler, C. S., Harrisburgh, Pa. Car-coupling	Feb. 11, 1873	285	89	3	162
143, 952	Bignall, S. L., Chicago, Ill. Door-hanger	Oct. 14, 1873	153	51	4	401
144, 652	Same.....Grindstone hanger	Oct. 28, 1873	540	179	4	452
	Billesbach, T., Kearney Junction, Nebr. Method of burning brick	Nov. 18, 1873	424	142	4	535
	Billinghurst, W., Rochester, N. Y. Fishing-reel (Extension)	Aug. 9, 1873	.....	.....	4	108
138, 471	Billings, C. E., Hartford, Conn. Die for making blanks for ship-hooks	May 6, 1873	6	2	3	498
144, 730	Billings, C. H., and G. W. Stockley, Cleveland, Ohio. Telegraph-key	Nov. 18, 1873	484	164	4	541
	Billings, G. W. (<i>See Lakey, J. H., assignor.</i>)					
137, 050	Billings, G. W., Chicago, Ill. Railway-switch	Mar. 25, 1873	636	210	3	326
137, 882	Same.....Railway-frog	Apr. 15, 1873	550	172	3	426
139, 358	Same.....Machine for rolling blooms	May 27, 1873	818	262	3	595
139, 359	Same.....Process for manufacturing rolled iron	May 27, 1873	819	.....	3	595
140, 759	Same.....Treating Bessemer steel and other metals to anneal them for punching, &c	July 15, 1873	373	128	4	58
142, 075	Billings, H., Boston, Mass. Playing-cards	Aug. 26, 1873	631	207	4	213
5, 538	Billings, O., Elyria, O. Harvester (Reissue)	Aug. 19, 1873	614	{ 202 203 }	4	202
	Billington, J. H. & Co. (<i>See Pilkington, J., assignor.</i>)					
141, 914	Billin, W. G., Thibodeaux, La. Apparatus for treating cane-juice with sulphur fumes	Aug. 19, 1873	472	155	4	190
134, 724	Billow, G. W., Shelby, Ohio. Paper-file	Jan. 14, 1873	223	71	3	38
	Bills, C. M. (<i>See Bills, J. C., and C. M.</i>)					
140, 991	Bills, J. C., Ottumwa, and C. M. Bills, Albia, Iowa. Paint for roofing, wood, metals, &c	July 22, 1873	601	.....	4	85
135, 070	Billups, C., Norfolk, Va. Cultivator	Jan. 21, 1873	535	174	3	78
135, 194	Bingham, A., Newtonville, Mass., assignor to F. Curtis, Boston, Mass. Sewing-machine	Jan. 28, 1873	654	211	3	100
134, 841	Bingham, A. D., Vergennes, Vt. Horse-shoe-nail machines	Jan. 14, 1873	322	103	3	46
	Bingham, E. B., <i>et al.</i> (<i>See Bingham, S. H., assignor.</i>)					
141, 106	Bingham, G. E., and J. F. Ewing, Chicago, Ill. Stove-platform	July 22, 1873	704	235	4	94
143, 870	Bingham, J., assignor to self, F. L. and D. R. Carnell, Philadelphia, Pa. Machines for making earthenware-pipe	Oct. 21, 1873	451	{ 150 151 }	4	435
145, 147	Bingham, J., and O. M. Pond, Waterloo, Iowa. Wheel-plow	Dec. 2, 1873	101	33	4	593
134, 969	Bingham, S., Saratoga Springs, N. Y. Hinge	Jan. 21, 1873	145	142	3	71
139, 360	Bingham, S. H., Philadelphia, Pa., assignor to self, E. B. Bingham, Newark, N. J., G. W. Van Allen, New York, N. Y., and W. N. Stone, Philadelphia, Pa. Rotary printing-press	May 27, 1873	820	262	3	595
	Binkly, C. G. (<i>See Eichenberger & Binkly.</i>)					
137, 408	Binnix, G. W., Sunbury, Pa. Chain-machine	Apr. 1, 1873	114	38	3	366
143, 743	Binns, L., Oakenshaw, England. Endless band	Oct. 21, 1873	342	114	4	426
145, 386	Binns, L., Bradford, England. Machine for making endless bands	Dec. 9, 1873	309	{ 104 105 }	4	623

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 169	Birch, W., Manchester, England. Machine for opening, smoothing, and guiding fabrics.	Mar. 25, 1873	741	246	3	334
145, 045	Birch, W., Walworth, Great Britain. Assignor of one-half interest to C. I. Temple, Chester, Pa. Treating horn to resemble whalebone.	Dec. 2, 1873	3	.....	4	586
135, 881	Birchard, J. F., Milwaukee, Wis. Folding-table.	Feb. 18, 1873	470	151	3	190
141, 986	Bird, C., Lower Merion Township, and W. H. Sullenberger, Harrisburgh, Pa. Bearings for shafts.	Aug. 19, 1873	527	174	4	195
142, 670	Bird, J., Philadelphia, Pa. Salt and pepper caster.	Sept. 9, 1873	314	104	4	279
134, 970	Birdsall, E. M. (See Spencer, A., jr., and T. C., assignors.)	Jan. 21, 1873	146	142	3	71
141, 751	Birge, W. H., Franklin, Pa. Rivet-pocket for oil-well pumps.	Aug. 12, 1873	310	101	4	168
142, 763	Birkenhead, J. (See Card, S. W., assignor.)	Sept. 16, 1873	403	136	4	297
137, 170	Birkenhead, J., Mansfield, Mass. Spindle-bolster for spinning-machines.	Mar. 25, 1873	743	247	3	334
138, 226	Birkett, H. M. (See Birkett, J. W., assignor.)	Apr. 29, 1873	893	282	3	471
137, 998	Birkett, J. W., assignor, to H. M. Birkett, Brooklyn, N. Y. Stop-cock.	Apr. 22, 1873	664	211	3	445
137, 883	Bisbing, I. W., Philadelphia, Pa., and J. S. McCune, Camden, N. J., assignors to said Bisbing, J. O. Cuthbert, Haddonfield, and L. Norris, Camden, N. J. Machines for shearing and booking tobacco.	Apr. 15, 1873	551	172	3	426
142, 431	Bisel, J. J., Williamsport, assignor to self and M. V. B. Steinmetz, Lancaster, Pa. Dry-goods stand.	Sept. 2, 1873	95	31	4	250
144, 731	Bishop, E. B., San Francisco, Cal. Dredger.	Nov. 18, 1873	485	164	4	541
135, 396	Bishop, G. W., Saratoga Springs, N. Y. Sash-fastener.	Feb. 4, 1873	1	1	3	128
140, 760	Bishop, G. W., assignor of one-half interest to L. E. Whiting, Saratoga Springs, N. Y. Sash-fastener.	July 15, 1873	374	128	4	58
145, 387	Bishop, J., Northville, Mich. Sash-fastener.	Dec. 9, 1873	313	105	4	623
144, 884	Bishop, J., Owego, N. Y. Railway rail-joint.	Nov. 25, 1873	627	213	4	563
141, 482	Bishop, J. V., Atlanta, Ga. Locomotive smoke-stack.	Aug. 5, 1873	64	20	4	140
145, 835	Bishop, P. A. (See Elder & Bishop.)	Dec. 23, 1873	719	237	4	680
136, 483	Bishop, W., Brooklyn, N. Y. Water-closet for vessels.	Mar. 4, 1873	113	37	3	254
137, 409	Bissell and Moore Manufacturing Company. (See Moore, D. and E., assignors.) (Reissue.)	Apr. 1, 1873	115	38	3	366
140, 609	Bissell, T. A., Detroit, Mich. Berth-lock for sleeping-cars.	July 8, 1873	246	83	4	40
140, 992	Bixby, F. N., West Meriden, Conn. Shipping-mechanism for machinery.	July 22, 1873	602	203	4	84
140, 399	Same. Tumbling-barrels for cleaning castings.	July 1, 1873	52	18	4	12
136, 126	Bixler, W. H., Easton, Pa. Needle-cushion.	Feb. 25, 1873	691	{ 223 } { 224 }	{ 3 }	219
144, 732	Black, F. (See Mixer, A. A., assignor.)	Nov. 18, 1873	486	164	4	541
139, 361	Black, H., Lewisburgh, Ohio. Railway-switch.	May 27, 1873	820	262	3	595
144, 594	Black, J., and G. W. Jones, Philadelphia, Pa. Propelling boats.	Nov. 18, 1873	372	125	4	531
136, 408	Black, J. B., assignor to A. O. Baker, Providence, R. I. Manufacture of joints for bracelets.	Mar. 4, 1873	48	17	3	249
140, 002	Black, J. H., Columbia, Pa. Sportsman's cartridge-holding vest.	June 17, 1873	515	163	3	673
142, 554	Black, S., West Alexandria, Ohio. Drill-teeth.	Sept. 9, 1873	216	70	4	271
140, 672	Blackburn, D. W., et al. (See Smith, A. C., assignor.)	July 8, 1873	295	99	4	43
3, 264	Blackburn, M., Sullivan, Ind. Circular-saw mill.	Jan. 28, 1873	850	274	3	116
133, 623	Blackham, J. W., Brooklyn, N. Y. Ornamenting felt-shirts, &c.	Feb. 11, 1873	227	71	3	157
6, 342	Blacklidge, W. G., Metamora, Ind., assignor of one-half interest to J. P. Alley, Cincinnati, Ohio. Saw-gummer.	Jan. 21, 1873	.....	.....	3	70
139, 858	Blackman, A. L., Cross Plains, Tenn., assignor of part interest to S. K. Schwenk, and J. E. Saunders. Wheel for vehicles.	Jan. 17, 1873	394	123	3	664
138, 369	Blackman, A. L., Cross Plains, Tenn. Wheel for vehicles.	Apr. 29, 1873	1,024	322	3	482
143, 660	Blackman, J. F., Brooklyn, assignors to Vanderburg, Wells & Co., New York, N. Y. Wood-type.	Oct. 14, 1873	239	80	4	408
145, 388	Blackmar, H. (See Fling, L. J., assignor.)	Dec. 9, 1873	314	105	4	623
140, 454	Blackstone, B., Warren, Ill. Quilting-frame.	July 1, 1873	92	32	4	16
139, 536	Blackstone, W., Shelby County, Ill. Plow.	June 3, 1873	77	26	3	615
138, 472	Blades, L. J., Harrington, Del. Ticket-case.	May 6, 1873	7	3	3	498
138, 729	Bladon, T., assignor of one-half interest to J. C. Metzger, Oak Harbor, Ohio. Combined stove-pipe shelf and drum.	Mar. 8, 1873	.....	.....	3	244
139, 654	Blair, B. X., Huntingdon, Pa. Mail-bag fastening.	May 13, 1873	245	77	3	527
135, 397	Blair, H. H., and S. Barry, Brunswick, Ohio. Spring-bed bottom.	June 10, 1873	197	64	3	641
135, 313	Blair, J. B., Philadelphia, Pa. Ruling-machine.	Feb. 4, 1873	2	1	3	128
142, 432	Blaisdell, P., Worcester, Mass. Drilling-machine.	Jan. 28, 1873	762	{ 246 } { 247 }	{ 3 }	109
142, 195	Blaisdell, W. S., and C. K. Young, Factory Point, Vt. Lamp.	Sept. 2, 1873	95	32	4	250
140, 003	Blaisdell, W. S., and E. Estabrook, Factory Point, Vt. Coffee-pot.	Aug. 26, 1873	733	241	4	221
139, 537	Blaisse, G. F., Philadelphia, Pa. Sliding chandelier.	June 17, 1873	516	164	3	674
144, 309	Blaisse, G. F., and J. Brannen, Philadelphia, Pa. Soldering-iron.	June 3, 1873	78	27	3	615
138, 370	Blaisse, G. F., and W. F. Crites, Philadelphia, Pa. Drop-light and hanger.	Nov. 4, 1873	112	38	4	487
145, 274	Blake, A., Waterbury, Conn. Animal-trap.	Apr. 26, 1873	.....	.....	3	444
145, 275	Blake, C. E., San Francisco, Cal. Clamp for dental purposes.	Apr. 29, 1873	1,025	323	3	482
145, 982	Same. Metallic foil for dental purposes.	Dec. 9, 1873	217	.....	4	615
134, 584	Same. Dental filling.	Dec. 9, 1873	217	74	4	615
145, 982	Same. Filling for decayed teeth.	Dec. 30, 1873	876	.....	4	703
145, 983	Blake, C. H., D. D., and F. M., Worcester, Mass. Machine for making shank-pieces for boots and shoes.	Jan. 7, 1873	80	25	3	13
142, 196	Blake, D. D. (See Blake, C. H., D. D., and F. M.)	Dec. 30, 1873	877	284	4	703
5, 696	Blake, E. H., Coatsburg, Ill. Draught equalizer.	Aug. 26, 1873	733	242	4	221
136, 300	Blake, E. W., et al. (See Marsden, H. R., assignor.)	Dec. 23, 1873	808	{ 264 } { 265 }	{ 4 }	687
138, 845	Blake, F. M. (See Blake, C. H., D. D., and F. M.)	Feb. 25, 1873	841	272	3	231
140, 400	Blake, G. W., Brooklyn, N. Y. Steam-boiler for warming buildings.	Mar. 13, 1873	349	108	3	536
143, 322	Blake, J. W., et al. (See Smith, T. S., assignor.)	July 1, 1873	53	19	4	12
	Blake, L. R., Boston, and A. S. Libby, Lawrence, Mass., assignors to G. McKay, trustee, Boston, Mass. Nailing-machine for boots and shoes.	Sept. 30, 1873	876	300	4	362
	Blake, L. R., Brooklyn, N. Y. Lasting-tool.					
	Same. Hydraulic hose.					
	Blake, L. R., Brooklyn, N. Y., and A. S. Libby, Lawrence, Mass. Nailing boots and shoes.					
	Blake, L. R., Brooklyn, N. Y. Lasting mechanism.					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
143, 661	Blake, L. R., Brooklyn, N. Y. Hydraulic hose	Oct. 14, 1873	240	81	4	408
145, 389	Blake, L. R., Brooklyn, N. Y., and A. S. Libby, Lawrence, Mass. Heel for boots and shoes.	Dec. 9, 1873	314	106	4	623
144, 500	Blake, R., Pontiac, Ill. Process for tanning leather	Nov. 11, 1873	283	.....	4	513
135, 624	Blake, W. E., New York, N. Y. Combined gun-stock and spade	Feb. 11, 1873	227	71	3	157
135, 511	Blakeley, M. A., and J. Cahill, Chattanooga, Tenn. Elevating apparatus	Feb. 4, 1873	105	34	3	136
145, 836	Blakemore, F. W., Philadelphia, Pa. Burglar-alarm	Dec. 23, 1873	720	237	4	680
	Blakeslee, C., et al. (See Krinks, J. S., assignor.)					
	Same..... (See Miller, C. G., assignor.)					
145, 837	Blakeslee, C. W., Plantsville, Conn. Tack-puller	Dec. 23, 1873	721	237	4	680
7, 015	Blakesley, G. H., Bristol, Conn. Clock-case	Dec. 2, 1873	.....	.....	4	585
	(Design)					
139, 859	Blakey, J., Leeds, England. Apparatus for manufacturing boot and shoe heels	June 17, 1873	395	{ 123 124 }	3	664
136, 897	Blakestone, Z. D., Saint Mary's County, Md. Tobacco-hiller	Mar. 18, 1873	494	164	3	303
136, 898	Same..... Tobacco-cultivator	Mar. 18, 1873	496	164	3	303
137, 339	Blakslee, J. B. and C. F., Saint Petersburg, Pa. Manufacture of traveling-bag frames ..	Apr. 1, 1873	58	17	3	361
137, 124	Blanchard, E., Poolesville, Md. Combined garden hoe and roller	Mar. 25, 1873	705	234	3	331
141, 987	Blanchard, H. A., Boston, Mass. Sewing-machine	Aug. 19, 1873	528	175	4	195
144, 433	Blanchard, J., assignor of one-half interest to H. W. Carter, East Saginaw, Mich. Plow.	Nov. 11, 1873	230	77	4	509
140, 879	Blanchard, J. M., and W. E. Prall, Washington, D. C. Pneumatic apparatus for elevat- ing water	July 15, 1873	474	161	4	66
	Blanchett, C. E., et al. (See Roosevelt, W. H., assignor.)					
	Bland, P. E. (See Rouse, A. M., assignor.)					
	Blanding, A. J. (See Blanding, F. and A. J.)					
134, 971	Blanding, F. and A. J., Lowell, Mass. Loom-shuttle	Jan. 21, 1873	147	143	3	71
	Blaney, C. J. (See Vaughn & Blaney.)					
144, 733	Blank, H. F., Liberty, Ill. Hay-press	Nov. 18, 1873	487	165	4	541
141, 313	Blätterlein, J. F. A., West Meriden, Conn. Curtain-fastener	July 29, 1873	909	298	4	118
141, 988	Blaiser, N. G., Etna, Ohio. Corn-cultivator	Aug. 19, 1873	529	175	4	195
141, 849	Blauvelt, M., Ithaca, N. Y. Dress-makers' marking and cutting gauge	Aug. 19, 1873	408	133	4	186
	Blazer, J. B. (See Bye, W. C., assignor.)					
143, 118	Bleckman, F., Washington, assignor to J. F. Imbs, Saint Louis, Mo. Middlings-purifier.	Sept. 23, 1873	701	241	4	332
137, 999	Blessing, C. A., Philadelphia, Pa. Turning-lathe for wood	Apr. 22, 1873	665	{ 211 212 }	3	445
5, 549	Blessing, J. H., assignor to self and F. Townsend, Albany, N. Y. Steam trap.. (Reissue).	Aug. 26, 1873	835	278	4	230
134, 972	Blessing, J. H., Albany, N. Y. Steam-boiler feeder	Jan. 21, 1873	147	143	3	71
137, 285	Blessing, J. H., assignor to F. Townsend and J. H. Blessing, Albany, N. Y. Steam-trap..	Apr. 1, 1873	5	2	3	357
142, 323	Blessing, J. H., assignor to self and F. Townsend, Albany, N. Y. Steam-trap	Sept. 2, 1873	1	1	4	242
142, 889	Blessing, L. W., assignor to self and H. Pusey, Wilmington, Del. Top-prop for carriages.	Sept. 16, 1873	504	172	4	305
	Blessing, W., Jeffersonville, Ohio. Seed-planter	Dec. 13, 1873	.....	.....	4	614
	(Extension)					
135, 463	Blinn, J., Rockford, Ill. Gate	Feb. 4, 1873	67	21	3	133
139, 940	Bliss, E. S., Richburgh, N. Y. Washing-machine	June 17, 1873	468	147	3	669
135, 314	Bliss, F. D., assignor to self and D. P. Gardner, New Bedford, Mass. Die-plate	Jan. 28, 1873	763	247	3	109
138, 000	Bliss, M. H., Dalton, Mass. Trunk	Apr. 22, 1873	669	212	3	445
143, 432	Bliss, S. B., New York, N. Y. Toy-device for making soap-bubbles	Oct. 7, 1873	32	11	4	383
	Bliss, S. S. (See Dean, N. C., assignor.)					
	Same..... same					
	(Reissue.)					
137, 171	Bloch, B. A., Paris, France. Hydraulic motor	Mar. 25, 1873	744	247	3	334
	Blocher, C. (See Moreland & Blocher.)					
140, 343	Blocher, D., Baltimore, Md., assignor of one-half interest to J. H. Seymour, Hagerstown, Md. Brick-kiln	July 1, 1873	8	3	4	8
135, 398	Blohm, J. H., New York, N. Y. Elevator	Feb. 4, 1873	2	1	3	128
145, 614	Blom, C., jr., assignor of one-half interest to T. J. Tubbs, Grand Haven, Mich. Ironing-table	Dec. 16, 1873	523	172	4	652
	Blondin, C. L. (See Delker & Blondin.)					
145, 615	Bloodgood, F. W., New York, N. Y. Machine for making batting	Dec. 16, 1873	523	172	4	652
	Bloodgood, W. (See Totten, S. E., jr., assignor.)					
	(Reissue.)					
	Bloss, J. W. (See Craine & Bloss.)					
141, 029	Blunck, G., New York, N. Y. Parallel ruler	July 22, 1873	634	214	4	88
133, 860	Blunt, G. G., assignor to self and J. L. Ashurst, Bath, Ill. Grain-drill	June 17, 1873	397	125	3	664
	Blunt, J. G., et al. (See Fullam, A. J., assignor.)					
	Same..... (See Priest, J. K., assignor.)					
	Same..... (See Smith, R. T., assignor.)					
	Blunt, J. G. (See Whipple & Blunt.)					
5, 367	Blunt, J. G., assignor of one-half interest to M. H. Insley, Leavenworth, Kans. Process and apparatus for puddling iron and steel	Apr. 22, 1873	878	277	3	462
	(Reissue.)					
137, 884	Blunt, J. G., Leavenworth, Kans. Blast-furnace	Apr. 15, 1873	552	173	3	426
137, 885	Same..... Manufacture of steel	Apr. 15, 1873	553	173	3	426
	(Reissue.)					
145, 927	Bly, D. (See Locke, H. H., assignor.)					
	Blye, W. H., Syracuse, N. Y. Hand-rubber	Dec. 30, 1873	826	269	4	699
	Blymer, J. S. (See Lippy & Blymer.)					
137, 172	Blythe, G., Chillicothe, Mo. Saw-filing machine	Mar. 25, 1873	746	247	3	334
136, 961	Boardman, D. G., Albia, Iowa. Corn-planter	Mar. 18, 1873	547	180	3	307
136, 962	Same..... Combined chair and lounge for invalids	Mar. 18, 1873	547	181	3	307
142, 197	Boardman, L. M., Ottawa, Minn. Fanning mill	Aug. 26, 1873	734	242	4	221
	Bobrownicki, A. (See Christy & Bobrownicki.)					
139, 109	Boch, M., New York, N. Y. Shoe-fastening	May 20, 1873	584	183	3	568
	Boch, W., sr., deceased, by N. Maidhof, executrix, New York, N. Y. Water-closet basin	Nov. 29, 1873	.....	.....	4	557
5, 517	Bock, H., New York, N. Y., assignor to W. W. McFarlan, Brooklyn, N. Y. Machine for making glass buttons	Aug. 5, 1873	181	58	4	150
	(Reissue.)					
	Bockoven, D. C. (See Jeffers & Bockoven.)					
139, 450	Bockstaller, G., assignor of one-half interest to C. Beer, Chicago, Ill. Carriage-top	June 3, 1873	3	1	3	619
142, 890	Boda, W. J., Dayton, Ohio. Molding-machine	Sept. 16, 1873	504	{ 172 173 }	4	305
140, 880	Bodenhamer, L. I., Kernersville, N. C. Reciprocating churn	July 15, 1873	476	161	4	66
	Bodine, J. F. (See Hewitt, T. B., assignor.)					
	Bodkin, J. S. (See Bodkin, L. P. & J. S.)					
138, 846	Bodkin, L. P. and J. S., Brooklyn, N. Y. Cooking-vessel	May 13, 1873	349	108	3	536
135, 195	Bodley, P., Saint Louis, Mo. Dumping-wagon	Jan. 28, 1873	656	211	3	101
135, 702	Bodmer, C., deceased, by E. and J. A. Duenz, administrators, Fayetteville, Ill. Lock ..	Feb. 11, 1873	297	94	3	163
	Bodwell, H. H. (See Atwood & Bodwell.)					
	(Reissue.)					
142, 198	Bodwell, H. H., and E. A. Atwood, San Francisco, Cal. Windmill	Aug. 26, 1873	735	242	4	221
	Bodwell, J. H. (See Green & Bodwell.)					
136, 694	Boeckeh, C., Toronto, Canada. Broom	Mar. 11, 1873	312	103	3	279
142, 199	Boehne, E. A., Saint Louis, Mo. Manufacturing white lead	Aug. 26, 1873	736		4	221

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 196	Boeklen, R., Brooklyn, N. Y. Machine for making bungs	Jan. 28, 1873	657	212	3	101
139, 861	Boeklen, R., New York, N. Y. Machine for swaging screw-threads on bolt and screw blanks	June 17, 1873	399	125	3	664
142, 200	Boeklen, R., Brooklyn, N. Y., assignor of one-half interest to J. Fuchs, New York, N. Y. Apparatus for emptying cellars, water-closets, &c.	Aug. 26, 1873	737	243	4	221
135, 965	Boerckel, J. F. (See Krapf & Boerckel.)					
135, 965	Boesen, P., and M. Bedessem, Kenosha, Wis. Bed-bottom	Feb. 18, 1873	535	177	3	195
137, 886	Boesse, C. H. (See Jordan, A. C., assignor.)					
142, 891	Boettcher, J. G. L., Brooklyn, N. Y. Manufacture of sheet-metal vessels	Apr. 15, 1873	555	174	3	426
142, 891	Bogart, G., W. H. Cramer, & W. L. Lewis, Laporte City, Iowa. Butter-coloring compound.	Sept. 16, 1873	505		4	305
134, 633	Bogart, P., jr. (See Swenson, G., assignor.)					
134, 633	Bogert, T. O., assignor to Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer	Jan. 7, 1873	125	40	3	17
5, 697	Bogia, M. C., Philadelphia, Pa. Machine for removing snow and ice from road-ways	Dec. 23, 1873	813	265	4	687
143, 491	Bohaker, A. W., Granville, Nova Scotia. Car-coupling	Oct. 7, 1873	79	27	4	387
135, 071	Bohn, J. C., Centralia, Ill. Spool-box	Jan. 21, 1873	536	174	3	78
5, 534	Bohner, G., Chicago, Ill. Hanging lamp	Aug. 19, 1873	610	201	4	201
144, 434	Boies, H. M., Scranton, Pa. Package of powder-charges for blasting	Nov. 11, 1873	231	77	4	509
135, 759	Boileau, E., assignor to Boileau Patent Stove and Furnace Fire-Plate Company, Saint Louis, Mo. Fire-plates for steam-boilers	Feb. 11, 1873	343	110	3	167
141, 989	Boileau, E., Saint Louis, Mo. Hinge	Aug. 19, 1873	530	175	4	195
143, 953	Boileau Patent Stove and Furnace Fire-Plate Company. (See Boileau, E., assignor.)					
136, 809	Bois, J. J., Rantoul, Ill. Grain-sampler	Oct. 28, 1873	541	179	4	452
141, 418	Bois, J. M., Salamanca, N. Y. Siphon pump	Mar. 18, 1873	423	140	3	298
136, 024	Boles, W. A., Shelbyville, Ind. Carpet-stretcher	Aug. 5, 1873	7	2	4	135
136, 810	Bolin, J. P., Orangeburgh County, S. C. Water-regulator	Feb. 18, 1873	586	193	3	199
137, 887	Bolinger, J. B., Michigan City, Ind. Treadle	Mar. 18, 1873	424	140	3	298
140, 401	Bolitho, E. (See Eaton, I. F., assignor.)					
140, 401	Boller, A. P., Orange, N. J. Turn-table	Apr. 15, 1873	555	174	3	426
140, 401	Bolles, T. (See Decker, L. H., assignor.)					
140, 401	Bollinger, O. J., York, Pa. Water-wheel	July 1, 1873	54	19	4	12
142, 368	Bollman, S. C. (See Chubb, J. J., assignor.)					
137, 125	Bolser, G. A., Indianapolis, Ind. Machine for turning wagon-axles	Sept. 2, 1873	41	15	4	245
140, 762	Bolton, O., jr., Pittsburgh, Pa. Cupola and other metallurgic furnaces	Mar. 25, 1873	705	234	3	331
141, 419	Same..... Manufacture of steel plates	July 15, 1873	376	128	4	58
143, 954	Same..... Manufacture of manganese, ferro-manganese, and spiegeleisen	Aug. 5, 1873	8		4	135
135, 512	Bolton, O., jr., Chartier's Township, Allegheny County, Pa. Utilizing gas as a motive power	Oct. 28, 1873	542	180	4	453
140, 673	Bolton, O., jr., and J. Pedder, Pittsburgh, Pa. Manufacture of iron and steel	Feb. 4, 1873	106		3	136
140, 761	Bolton, O., jr., Chartier's Township, and J. Pedder, Pittsburgh, Pa. Manufacture of steel for boiler-plates, &c.	July 8, 1873	296		4	43
143, 955	Bolton, O., jr., and J. Pedder, Pittsburgh, Pa. Manufacture of iron and steel	July 15, 1873	375		4	58
135, 513	Bond, H., assignor to M. How, Haverhill, Mass. Guide for sewing shoes	Oct. 28, 1873	543	180	4	453
136, 208	Bond, J. N. B., New York, N. Y. Hoisting-apparatus	Feb. 4, 1873	107	34	3	136
139, 759	Same..... Apparatus for rendering lard, treating offal, &c.	Feb. 25, 1873	759	245	3	224
136, 640	Same..... Apparatus for treating offal	June 10, 1873	302	93	3	649
139, 760	Bond, L. L., Chicago, Ill. Device for coupling cars	Mar. 11, 1873	270	90	3	276
141, 483	Bond, N. O., Fairfax Court-House, Va. Portable cooking stove	June 10, 1873	303	94	3	649
141, 915	Bond, T. W., et al. (See Smith, J. H., assignor.)					
135, 760	Bonhack, C. F., New York, N. Y. Manufacture of friction-matches	Aug. 5, 1873	64	20	4	140
135, 882	Bonnaz, A., Paris, France. Micrometer-gauge	Aug. 19, 1873	473	155	4	190
135, 883	Bonnell, J. C., Burlington, Iowa. Blank book	Feb. 11, 1873	344	110	3	167
138, 121	Bonney, C. S., Philadelphia, Pa. Clamp	Feb. 18, 1873	471	151	3	190
140, 455	Same..... Saw-filing vise	Feb. 18, 1873	471	152	3	190
145, 483	Bonney, O., jr., San Francisco, Cal. Band-sewing machine	Apr. 22, 1873	775	247	3	454
134, 634	Bonzano, A., et al. (See Clark, T. C., assignor.)					
141, 690	Same..... (See Clarke, Bonzano & Griffen.)					
134, 635	Bonzano, A., Phenixville, assignor to Clarke, Reeves & Co., Philadelphia, Pa. Connection for wrought-iron beams and columns	July 1, 1873	93	32	4	16
5, 256	Boobar, E. C., San Francisco, Cal. Means for sinking broken piles	Dec. 16, 1873	404	133	4	642
135, 514	Boody, H. F., and E. P. Merrill, Portland, Me. Feed-water heater	Jan. 7, 1873	126	41	3	17
142, 324	Booker, E. H. (See Booker, T. L., assignor.)					
143, 218	Booker, T. S., Shady Grove, Va., assignor to self and E. H. Booker, Donaldsonville, S. C. Hame-fastener	Aug. 12, 1873	261	84	4	164
136, 025	Bookwalter, J. W., Springfield, Ohio. Steam-generator	Jan. 7, 1873	127	41	3	17
138, 122	Boomer, G. B., Syracuse, N. Y., T. G. Morse, Erie, Pa., and R. E. Boschert, Syracuse, N. Y., said Morse assignor to said Boomer. Cheese-press	Jan. 20, 1873	841	271	3	115
144, 595	Boomer, G. B., Syracuse, N. Y. Cheese-hoop	Feb. 4, 1873	108	34	3	136
145, 616	Boon, A. T., assignor of one-half interest to T. O. Jones, Galesburgh, Ill. Windmill	Sept. 2, 1873	3	1	4	242
143, 218	Boone, W. C. (See Pittman & Boone)..... (Extension.)					
6, 776	Boorn, S., Lowell, Mass. Loom-picker	Sept. 30, 1873	784	271	4	354
6, 777	Boot and Shoe Improvement Company. (See Farnsworth, L. H., assignor.)					
6, 778	Boot, H., assignor to T. Dolan & Co., Philadelphia, Pa. Nubia	July 22, 1873			4	85
6, 792	Same..... same	July 22, 1873			4	85
138, 371	Same..... same	July 22, 1873			4	85
136, 025	Boot, H., assignor to T. Dolan & Co., Philadelphia, Pa. Nubia	Aug. 5, 1873			4	135
138, 122	Booth, E., assignor of one-half interest to H. V. Colsten, Great Bend, Pa. Hemmer for sewing-machine	Apr. 29, 1873	1,025	323	3	482
138, 123	Booth, G., Philadelphia, Pa. Metal-coated ware	Feb. 18, 1873	587		3	199
144, 595	Same..... Grater	Apr. 22, 1873	776	248	3	454
145, 616	Same..... Vegetable-grater	Apr. 22, 1873	776	248	3	454
143, 218	Booth, G., Toronto, Canada. Fire-extinguisher	Nov. 18, 1873	373	126	4	531
145, 616	Booth, J. L., Rochester, N. Y. Grain-separator	Sept. 20, 1873			4	295
139, 362	Booth, O. W., Providence, R. I. Weather-strip	Dec. 16, 1873	524	172	4	652
143, 871	Boothby, H., et al. (See Forrest, H. E., assignor.)					
142, 076	Bootsman, T., New Brighton, N. Y. Dumping-car	May 27, 1873	821	{ 262 } { 263 }	3	595
143, 872	Bootsman, T., Tompkinsville, N. Y. Knife polisher and sharpener	Oct. 21, 1873	451	151	4	435
144, 310	Borchardt, J. M., assignor to M. Amberg, New York, N. Y. Buckle	Aug. 26, 1873	632	208	4	213
	Bordas, C., New York, N. Y. Apparatus for transferring embroidery-patterns	Oct. 21, 1873	452	151	4	435
	Borden, G., White Plains, and J. G. Borden, South East, N. Y. Process of preserving and condensing milk	Nov. 4, 1873	113		4	487

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144, 311	Borden, G., White Plains, and J. G. Borden, South East, N. Y. Condensed milk.	Nov. 4, 1873	114		4	487
144, 885	Borden, J., and J. L. Trimble, Medford, N. J. Glass bottle.	Nov. 25, 1873	628	213	4	563
	Borden, J. G. (See Borden, G. and J. G.)					
136, 209	Borden, T., assignor to self, D. P. Kisner, and T. Hulett. Squancum, N. J. Pruning-shears.	Feb. 25, 1873	760	245	3	225
142, 369	Bordner, H., and D. Sullivan, Virginia City, Nev. Boot-crimping block.	Sept. 2, 1873	42	15	4	245
145, 984	Borel, U., Sne City, Mo. Stock-feeder.	Dec. 30, 1873	877	284	4	703
138, 606	Borgfeldt, N. H., New York, N. Y. Tobacco-cutting machine.	May 6, 1873	119	39	3	507
	Borlinghaus, H., sr. (See Brunswick & Borlinghaus.)					
	Borm, C. (See Schwartz, C. C. E., assignor.)					
139, 231	Born, F. W., Cleveland, Ohio. Base-burning stove.	May 27, 1873	715	225	3	586
135, 029	Borneman, A., Lancaster, Ohio. Corn-sheller case.	Jan. 21, 1873	500	161	3	75
135, 761	Borton, J., and W. H. Hartley, Quaker City, Ohio. Churn.	Feb. 11, 1873	345	111	3	167
5, 484	Bortree, M. K., Jackson, Mich. Bustle.	July 15, 1873	587	197	4	75
136, 127	Same. Bustle.	Feb. 25, 1873	692	224	3	219
	Borwick, A. (See Gibbs & Borwick.)					
142, 671	Boschen, J. H., New York, N. Y. Sewer basin for street corners.	Sept. 9, 1873	315	105	4	279
	Boschert, R. E. (See Boomer, Morse & Boschert.) (Reissue.)					
141, 752	Boschke, A., San Francisco, Cal. Dredging-machine.	Aug. 12, 1873	311	102	4	168
	Boss, J., Berlin, Md. Manufacture of watch-cases. (Extension.)	May 3, 1873	.....	.....	3	470
145, 718	Boss, M. P., Bullionville, Nev. Quicksilver-pump.	Dec. 23, 1873	623	204	4	672
142, 370	Bostian, B. F., New Columbia, Pa. Picture and card exhibitor.	Sept. 2, 1873	43	15	4	245
	Boston and Maine Foundry Company. (See Mingay, E., assignor.) (Design.)					
145, 780	Bosworth, M. W., Binghamton, N. Y. Grain-car unloader.	Dec. 23, 1873	678	222	4	676
	Boteler, E. M. (See Taltavull, P., assignor.)					
138, 227	Both, A. C., Portland, Me. Dredger.	Apr. 29, 1873	893	282	3	472
134, 973	Bothwell, E. P., McArthur, Ohio. Fruit-box.	Jan. 21, 1873	149	143	3	71
144, 596	Botsford, N., Lockport, N. Y. Vegetable-slicer.	Nov. 18, 1873	373	126	4	532
5, 657	Bottomley, T. J., Burlington, Wis., assignor to Pratt and Letchworth, Buffalo, N. Y. Tug-holder.	Nov. 18, 1873	561	190	4	547
	Same. (Reissue.)	Nov. 18, 1873	561	190	4	547
137, 652	Bottum, J. M., New York, N. Y. Governor for steam-engines, &c.	Apr. 8, 1873	339	105	3	396
141, 537	Bouchard, A., New Orleans, La. Self-operating switch.	Aug. 5, 1873	110	35	4	144
135, 315	Boucher, W. F., Philadelphia, Pa. Transparent slate-frame.	Jan. 28, 1873	765	247	3	109
144, 249	Boughton, E., South Norwalk, Conn. Hot-air draft for furnaces.	Nov. 4, 1873	70	22	4	483
139, 232	Boughton, J. W., Philadelphia, Pa. Nursery-gate.	May 27, 1873	716	225	3	586
140, 674	Same. Window-screen.	July 8, 1873	297	99	4	44
138, 730	Bouillon, E., New Orleans, La. Tucking attachment for sewing-machines.	May 13, 1873	246	77	3	527
144, 946	Boulcault, J. B., New Albany, Ind. Flattening-oven for plate-glass.	Nov. 25, 1873	675	229	4	567
135, 515	Boult, M. T., Battle Creek, Mich. Apparatus for turning ovals.	Feb. 4, 1873	108	35	3	136
142, 764	Boupart, M., Fordham, N. Y. Bustle.	Sept. 16, 1873	404	136	4	297
141, 198	Bourdereaux, P., New York, N. Y. Breech-loading fire-arm.	July 29, 1873	801	262	4	109
143, 119	Bourgnignon, W., Providence, R. I. Mosquito-canopy.	Sept. 23, 1873	702	241	4	332
145, 484	Same. Bottle-cover.	Dec. 16, 1873	405	133	4	642
138, 784	Bourn, W., Geneva, N. Y. Wood-screw.	May 13, 1873	294	90	3	531
144, 653	Bourne, E., New Iberia, La. Plow.	Nov. 18, 1873	424	142	4	535
	Bourne, W. O., New York, N. Y. Ore-separator. (Extension.)	June 14, 1873	.....	.....	3	640
24, 367	Same. Ore-separator. (Disclaimer filed.)	June 11, 1873	.....	.....	3	640
139, 761	Bouser, W. H., Paris, Ill. Earth-boring machine.	June 10, 1873	304	94	3	649
138, 731	Bovey, G. C., Chillicothe, Ohio. Brick-machine.	May 13, 1873	247	77	3	527
139, 110	Same. Machine for pulverizing clay.	May 20, 1873	585	183	3	568
135, 399	Bowden, J., and R. Shaw Marple, assignor of one-half interest to W. Wilson, Newcastle-on-Tyne, Great Britain. Machine for felting hat-bodies.	Feb. 4, 1873	3	2	3	128
140, 456	Bowdish, N. S., Richfield Springs, N. Y. Roller-press for polishing photographs.	July 1, 1873	94	32	4	16
141, 256	Same. Camera stand.	July 29, 1873	860	281	4	114
141, 850	Bowen, B. W., Greenville, Pa. Washing-machine.	Aug. 19, 1873	409	133	4	186
141, 753	Bowen, R. E., George's Creek, S. C. Cotton-planter.	Aug. 12, 1873	312	102	4	168
141, 851	Bowen, S. B., Stockton, Cal. Horse hay-fork.	Aug. 19, 1873	409	133	4	186
	Bowen, W. H. (See Register & Bowen.)					
140, 181	Bower, D. E., Troy, Ohio. Truss-bridge.	June 24, 1873	696	219	3	696
134, 725	Bower, J., Lafayette, Ind. Axle-box and spindle.	Jan. 14, 1873	223	71	3	33
135, 762	Bower, J. W., Greencastle, Ind. Railway-truck.	Feb. 11, 1873	345	111	3	167
134, 726	Bowers, J., assignor to J. A. Ives and Brother, Baltimore County, Maryland. Sheets for forming the bodies of square or rectangular tin-cans.	Jan. 14, 1873	224	72	3	38
142, 433	Bowers, W. H. H., Franklin, Ky. Apparatus for propelling street-cars by compressed air.	Sept. 2, 1873	96	32	4	250
142, 765	Bowler, N. P., Cleveland, Ohio. Mold for plaster-pipe patterns.	Sept. 16, 1873	405	137	4	297
142, 325	Bowles, H., Trempealeau, Wis. Spring for vehicles.	Sept. 2, 1873	4	2	4	242
145, 552	Bowman, R. M. and W. H., London, Ohio. Corn-dropper.	Dec. 16, 1873	474	155	4	647
141, 754	Bowman, W. A. D., Poughkeepsie, N. Y. Spike-machine.	Aug. 12, 1873	313	102	4	169
	Bowman, W. H. (See Bowman, R. M. and W. H.)					
144, 886	Bowman, W. H., London, Ohio. Nut-lock.	Nov. 25, 1873	628	213	4	563
145, 390	Bowman, W. R., Danville, Ky. Thill-coupling.	Dec. 9, 1873	315	106	4	623
	Bowron, W. M. (See Holmes & Bowron.)					
143, 054	Boyce, D., North Providence, R. I. Bench-hook.	Sept. 23, 1873	654	224	4	327
	Boyd, A., executor. (See Boyd, J. C.) (Extension.)					
138, 124	Boyd, A. C., assignor to E. W. Vaill, Worcester, Mass. Folding-chair.	Apr. 22, 1873	778	248	3	454
145, 985	Boyd, D., Vevay, Ind. Churn-dasher.	Dec. 30, 1873	878	284	4	703
	Boyd, J. C., deceased, by A. Boyd, Boston, and S. Wheelwright, Lexington, Mass., executors. Elastic hose-tubing. (Extension.)	Aug. 30, 1873	.....	.....	4	240
143, 662	Boyd, J. H., Chicago, Ill. Reducing ores.	Oct. 14, 1873	240	81	4	409
144, 184	Same. Furnace for reducing ores containing precious metals.	Nov. 4, 1873	8	2	4	479
144, 185	Same. Apparatus for feeding fuel to ore-reducing furnaces.	Nov. 4, 1873	10	3	4	479
144, 186	Same. Furnace for reducing the ores and extracting the precious metals.	Nov. 4, 1873	11	3	4	479
144, 250	Boyd, J. H., Plain, S. C. Guano and seed distributor.	Nov. 4, 1873	71	23	4	484
134, 842	Boyd, L. R., New Brunswick, N. J. Oil-can stopper.	Jan. 14, 1873	323	103	3	46
135, 072	Same. Oil dripping-can.	Jan. 21, 1873	537	174	3	78
	Boyd, R. (See E. H. Thurston, assignor.)					
141, 107	Boyd, T., Cambridgeport, Mass. Chimney-cap.	July 22, 1873	704	236	4	94
142, 555	Boyd, E., Lowell, Mass. Elevator.	Sept. 9, 1873	217	71	4	271
135, 400	Boyd, J. L., Bridgeport, Conn. Combined mop and mop-wringer.	Feb. 4, 1873	5	2	3	128
143, 055	Boyd, W. A., Harrisburgh, Pa. Car-coupling.	Sept. 23, 1873	654	224	4	328
143, 956	Same. Metallic piston-packing.	Oct. 28, 1873	544	180	4	453
	Boyer, J. E., et al. (See Foglesong, W., assignor.)					
143, 611	Boyer, W. H., Baltimore, Md. Sewing-machine table.	Oct. 14, 1873	198	66	4	405
135, 516	Boyett, S. A., Grenada, Miss. Feather-renovator.	Feb. 4, 1873	109	35	3	136

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 804	Boyington, L. C. (See Edwards, C. H., assignor.)	Oct. 21, 1873	396	131	4	430
143, 744	Boyle, C., Washington, D. C. Office-slate	Oct. 21, 1873	343	114	4	426
142, 371	Boyle, D. A., Attica, Ohio. Spring for wagons	Sept. 2, 1873	44	15, 16	4	246
	Boyle, H., London, England. Heat-regulator					
	Boyle, J. (See Koch & Brass, assignors.)					
	Same..... (See Stephens, H., assignor.)					
135, 966	Boyle, J., New York, N. Y. Awning	Feb. 18, 1873	535	177	3	195
141, 257	Same..... Manufacture of boots and shoes	July 29, 1873	861	281	4	114
141, 755	Boyle, R. K., New York, N. Y. Electric apparatus for signaling between railway-trains	Aug. 12, 1873	313	103	4	169
143, 663	Same..... same	Oct. 14, 1873	242	81	4	409
137, 410	Boynton, A. and W., assignors to selves and E. M. Boynton, Brooklyn, N. Y. Saw-set	Apr. 1, 1873	116	38	3	366
	Boynton, E. M. (See Boynton, A. and W., assignors.)					
143, 957	Boynton, S. S. and D. Keefe, Peoria, Ill. Ice-pick	Oct. 28, 1873	544	180	4	453
	Boynton, W. (See Boynton, A. and W.)					
144, 947	Boynton, W. J., Battle Creek, Mich. Saw-set	Nov. 25, 1873	677	229	4	567
140, 457	Brabrook, G., assignor to Reed and Barton, Taunton, Mass. Coffin-plate	July 1, 1873	95	32	4	16
138, 847	Brabson, T. F., Brooklyn, N. Y. Cartridge-box	May 13, 1873	350	108	3	536
138, 372	Brace, W., Washingtonville, Ohio. Work-box	Apr. 29, 1873	1,026	323	3	482
140, 110	Brace, W. H., assignor to self and J. R. Woodworth, Nunda, N. Y. Wagon-spring	June 24, 1873	635	199	3	691
142, 986	Brach, L., Philadelphia, Pa. Water-cooler	Sept. 23, 1873	593	202	4	323
145, 391	Bracher, T. W., New York, N. Y. Ornamental label for hat-linings	Dec. 9, 1873	316	106	4	623
141, 420	Brackett, J., Lynn, Mass. Lasting boots and shoes	Aug. 5, 1873	9	2	4	136
144, 597	Brackett, S. A., Boston, Mass. Attaching knobs to drawers, &c	Nov. 18, 1873	374	126	4	532
5, 391	Brackett, S. A., and W. W. Whitecomb, Boston, Mass. Seam for boots, &c. (Reissue)	May 6, 1873	235	73	3	516
134, 843	Brada, J., New York, N. Y. Sofa-bedstead	Jan. 14, 1873	324	103	3	46
135, 316	Bradford, D., Hamilton, Canada. Car-coupling	Jan. 28, 1873	766	247	3	109
	Bradford, H. (See Wilford, J. B., assignor.)					
143, 219	Bradford, H., Reading, Pa. Separator for coal, ores, &c	Sept. 30, 1873	785	{ 271 } { 272 }	4	354
143, 323	Same..... Feeding-device for coal and ore separators	Sept. 30, 1873	877	300	4	362
143, 492	Same..... Apparatus for separating ores and other substances	Oct. 7, 1873	80	27	4	387
143, 745	Same..... Coal-breaker	Oct. 21, 1873	344	115	4	426
135, 073	Bradford, H. C., Providence, R. I. Crank-movement	Jan. 21, 1873	537	174	3	78
135, 763	Same..... Machine for setting button and lacing hooks	Feb. 11, 1873	346	111	3	167
135, 197	Bradford, J., assignor to Chicago Shot-Tower Company, Chicago, Ill. Revolving bullet-mold	Jan. 28, 1873	659	212	3	101
140, 458	Bradford, J., Wilmington, Del. Inclined way for building levees	July 1, 1873	95	33	4	16
136, 301	Bradford, L. G., Plymouth, Mass. Bedstead-fastening	Feb. 25, 1873	842	272	3	231
134, 727	Bradford, W. B., Charlotte, N. C. Sash-holder	Jan. 14, 1873	225	72	3	38
	Bradford and Hubbard. (See Bradley, N. L., assignor.) (Design.)					
	Same..... same					
	Same..... (See Evarts, J. A., assignor.)					
	Same..... (See Evarts & Cinquini, assignors.) (Reissue.)					
	Same..... (See Shepard, H. E., assignor.)					
	Same..... (See Stratton, H., assignor.)					
	Same..... (See Tyler, H. B., assignor.)					
	Bradley, A. C. (See Bradley, S. R. and A. C.)					
135, 401	Bradley, B. C., Chicago, Ill. Cultivator	Feb. 14, 1873	6	2	3	128
140, 111	Same..... Wrench	June 24, 1873	636	200	3	691
	Bradley, C. (See Smith, I. B. and H., and Bradley.)					
137, 591	Bradley, C. A., Monticello, Fla. Steam-washer	Apr. 8, 1873	289	89	3	392
141, 030	Bradley, C. D., Taunton, Mass. Medical compound for neutralizing the taste of cod-liver oil	July 22, 1873	636	.....	4	88
144, 948	Bradley, C. E., Wilmington, Del. Compound for filling wood	Nov. 25, 1873	678	.....	4	567
137, 411	Bradley, E. F., assignor to J. Sheldon, New Haven, Conn. Brush-machine	Apr. 1, 1873	117	38, 39	3	366
137, 340	Bradley, E. L., et al. (See Andrews, E., assignor.)					
145, 331	Bradley, E. N., Bridgeport, Conn. Wall or window washer	Apr. 1, 1873	59	18	3	361
139, 290	Bradley, G., assignor to C. R. Chandler, Rockford, Ill. Wheel cultivator	Dec. 9, 1873	268	90	4	619
5, 634	Bradley, H. D., assignor to Bristol Brass and Clock Company, Forestville, Conn. Hinge	May 27, 1873	769	244	3	591
	Bradley, J., and J. Nicholas, Gomer, O. Machine for thrashing and hulling clover. (Reissue)	Oct. 28, 1873	744	247	4	469
138, 556	Same..... Machine for thrashing and hulling corn	May 6, 1873	80	26	3	504
134, 636	Bradley, L., Jersey City, N. J. Apparatus for electric measurement	Jan. 7, 1873	128	41	3	17
6, 949	Bradley, M., Springfield, Mass., assignor to the Union Manufacturing Company, New Britain, Conn. Butt-hinge. (Design.)	Oct. 7, 1873	.....	.....	4	380
6, 899	Bradley, N. L., assignor to Bradley and Hubbard, West Meriden, Conn. Lamp-foot	Sept. 30, 1873	.....	.....	4	354
7, 049	Same..... Lamp-pedestal. (Design.)	Dec. 16, 1873	.....	.....	4	641
134, 585	Same..... Chandelier. (Design.)	Jan. 7, 1873	81	26	3	13
138, 848	Bradley, S. R. and A. C., Brooklyn, N. Y. Car-starter	May 13, 1873	351	109	3	536
	Bradley, W. (See Parmiter & Bradley.)					
134, 586	Bradley, W., Providence, R. I. Cover for pitchers	Jan. 7, 1873	82	26	3	13
	Bradley, W. L. (See Whittier, C., assignor.)					
134, 844	Bradley, W. L., Boston, Mass. Apparatus for treating offal	Jan. 14, 1873	325	104	3	46
	Bradt, T. D. (See Greene & Bradt.)					
	Brady, F. A., et al. (See Gifford, E. N., assignor.)					
144, 654	Brady, L. C., Chambersville, Pa. Dumping-car	Nov. 18, 1873	425	143	4	535
	Bragg, H. M. (See Duffee, E., assignor.)					
140, 675	Bragg, I. W., Kidder, Mo. Harvester	July 8, 1873	298	100	4	44
139, 291	Brahn, J., Jersey City, N. J. Railway-fog	May 27, 1873	770	244	3	591
145, 781	Same..... Railway-crossing	Dec. 23, 1873	679	222	4	676
	Braidwood, J. (See Chaput and W. and J. Braidwood.)					
	Braidwood, W. (See Chaput and W. and J. Braidwood.)					
141, 314	Braidwood, W. and H. J. Hewitt, New York, N. Y. Rotary printing-press	July 29, 1873	910	298	4	118
141, 315	Same..... same	July 29, 1873	912	299	4	118
136, 128	Bradley, P., Oakland, Cal. Swimming-bath	Feb. 25, 1873	693	224	3	219
	Bramble, J., jr. (See Entekin & Bramble.)					
140, 182	Bramer, F., Little Falls, N. Y. Combined wheel-harrow and seeder	June 24, 1873	697	219	3	696
136, 899	Branch, G. M., Winona, assignor to W. A. Moore, Magnolia, Miss. Horse-power	Mar. 18, 1873	497	164	3	303
	Branch, H. A., et al. (See Dayton, M. E., assignor.)					
	Branch, J. H. (See Crookes, J., assignor.)					
	Branch, J. W. (See Crookes, J., assignor.)					
	Same..... (See Marriott, A., assignor.)					
143, 558	Brand, C. F., assignors of one-half interest to Philadelphia Architectural Iron Company, Philadelphia, Pa. Machine for bending sheet-metal	Oct. 14, 1873	153	51	4	401
144, 501	Same..... Assignors to the Architectural Iron Company, Philadelphia, Pa. Fire-proof partition	Nov. 11, 1873	284	96	4	513

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145,782	Brand, P., J. Barrows, and A. Armstrong, Jacksonville, Ill. Wind-wheel.....	Dec. 23, 1873	679	222	4	677
140,112	Brand, W. and G. Puder, Evansville, Ind. Rotary churn.....	June 24, 1873	636	200	3	692
142,201	Brandeis, S., assignor to self and J. R. Jones, and S. T. Benner, Philadelphia, Pa. Metallic column.....	Aug. 26, 1873	738	243	4	222
	Brandon, D. H. (See Baranowski, J. J., assignor.)					
	Brandt, H. P. (See Voss & Brandt.)					
144,312	Branigan, T., Beloit, Wis. Boot-tree.....	Nov. 4, 1873	114	38, 39	4	488
	Brannen, J. (See Blaisse & Brannen.)					
140,459	Brannen, J., Philadelphia, Pa. Sliding or extension chandeliers.....	July 1, 1873	96	33	4	16
	Branson, J. L. (See Barker, J. C., assignor.)					
	Braserton, T. C. (See Grigsby & Braserton.)					
	Brass, R. (See Koch & Brass.)					
143,664	Brassil, M., Hartford, Conn. Spark-arrester for locomotives.....	Oct. 14, 1873	243	82	4	409
136,409	Brate, B. F., New Scotland, N. Y. Cultivator.....	Mar. 4, 1873	49	17	3	249
134,510	Bratt, L. H., South Bend, Ind. Horse-power.....	Jan. 7, 1873	9	3	3	8
142,202	Braun, A. & F., Buffalo, N. Y. Billiard-table.....	Aug. 26, 1873	739	243	4	222
	Braun, F. (See Braun, A. & F.)					
138,066	Braun, J., assignor to Goodell, Braun & Co., Philadelphia, Pa. Nut-machine.....	Apr. 22, 1873	733	232	3	450
138,067	Same..... Machine for making machine-screws.....	Apr. 22, 1873	734	232	3	450
135,517	Braman, G. A., Baltimore, Md. Car-axle lubricator.....	Feb. 4, 1873	110	35	3	136
139,493	Bray, A., Chicopee, Mass. Invalid-bedstead.....	June 3, 1873	46	14	3	612
5,257	Bray, M., Newton, Mass. Die for forming sheet-metal ware..... (Reissue.)	Jan. 28, 1873	842	271	3	115
140,881	Same..... Manufacture of hollow rivets.....	July 15, 1873	477	161	4	66
142,203	Same..... Boot and shoe heel.....	Aug. 26, 1873	740	243	4	222
144,380	Same..... Can for fruit, &c.....	Nov. 11, 1873	184	63	4	505
136,484	Bray, W., Lambertville, N. J. Refrigerating apparatus for vessels, railway-cars, &c.....	Mar. 4, 1873	114	38	3	255
145,838	Same..... Ice-machine.....	Dec. 23, 1873	722	238	4	680
6,785	Brayer, N., Rochester, N. Y. Monumental urn..... (Design.)	July 29, 1873			4	108
	Brayley, J. (See Bronson, L., assignor.)					
141,108	Brayton, E. K., and J. Baugh, Eau Claire, Wis. Trace-buckle.....	July 22, 1873	705	236	4	94
136,695	Brear, A., Saugatuck, Conn. Smoking-tube.....	Mar. 11, 1873	313	104	3	279
145,617	Same..... assignor to self and W. W. W. Wood, Washington, D. C. Rotary pump or blower.....	Dec. 16, 1873	525	172	4	652
	Brearily, J. T. (See Roberts, L., assignor.)					
5,239	Breckenridge, R. M., West Meriden, Conn. Stove-pipe damper..... (Reissue.)	Jan. 21, 1873	633	206	3	86
137,126	Breed, A., La Harpe, Ill. Clack-valve for wooden pumps.....	Mar. 25, 1873	705	234	3	331
	Breed, G. F., et al. (See Carey, A. C., assignor.)					
144,251	Breeden, H. S., Barry, Ill. Scissors.....	Nov. 4, 1873	71	23	4	484
142,672	Breese, J. W., Canandaigua, Mich. Grain-separator.....	Sept. 9, 1873	316	105	4	279
	Breitenstein, H. (See Bailey, J., assignor.)					
137,173	Brenner, F., Cincinnati, Ohio. Apparatus for pitching cask.....	Mar. 25, 1873	747	247	3	334
143,401	Brenner, M., Baltimore, Md. Slaughtering-apparatus.....	Oct. 7, 1873	3	1	4	381
145,086	Brereton, R., Easton, Pa., assignor to B. Douglass, Montrose, N. J. Steam and vapor generator.....	Dec. 2, 1873	45	14	4	589
138,068	Bresnihan, J. D., Montgomery, Ala. Boiler fire-extinguisher.....	Apr. 22, 1873	736	233	3	450
139,762	Brett, B., Geneva, Ohio. Automatic boiler-feed regulator.....	June 10, 1873	306	95	3	649
145,392	Brett, H. W., Boston, Mass. Sand-paper roller.....	Dec. 9, 1873	317	106	4	623
136,963	Brettell, E. W., New Haven, Conn. Permutation-lock.....	Mar. 18, 1873	548	181 } 182 }	3	308
145,618	Same..... Tumbler for permutation-locks.....	Dec. 16, 1873	526	173	4	652
140,113	Brettell, G. E., Rochester, N. Y. Mandrel for holding tempered cast rings.....	June 24, 1873	637	200	3	692
135,317	Breval, L., Paris, France. Apparatus for expressing liquid from spent tan-bark.....	Jan. 28, 1873	767	248	3	109
	Brevoort, H. L. (See Craig & Brevoort.)					
	Brewer, J. (See Morrell & Brewer.)					
139,655	Brewer, R., New York, N. Y. Railway-car axle-box.....	June 10, 1873	198	65	3	641
135,030	Brewer, W. D., Charlestown, Mass. Cigar bunch-pressing and molding machine.....	Jan. 21, 1873	501	161	3	75
135,031	Same..... Retainer for pressed and molded cigar-bunches.....	Jan. 21, 1873	502	162	3	75
	Brewster & Co. (See Mosier, J. L. H., assignor.)					
	Brewster, J. B. & Co. (See Wood, T. H., assignor.)					
135,402	Brewster, W. S., Chicago, Ill. Lock for freight-car doors.....	Feb. 4, 1873	6		3	128
140,676	Brice, G. A., Townville, Pa. Fifth-wheel for vehicles.....	July 8, 1873	299	100	4	44
143,958	Same..... Spring-wagon.....	Oct. 28, 1873	545	181	4	453
138,069	Brick, J. M., Marlton, N. J. Corn-stalk knife.....	Apr. 22, 1873	737	233	3	451
144,313	Bridge, J., Augusta, Me. Wood-grinder.....	Nov. 4, 1873	115	39	4	488
	Bridge, L. (See Stuart & Bridge.)					
	Bridgeport Electro-Casting Company. (See Rebstock & Ottner, assignors) .. (Reissue.)					
139,862	Bridges, A., Westfield, N. J. Car-spring.....	June 17, 1873	400	125	3	664
144,054	Brien, R. & W., Jersey City, N. J. Ventilator and pipe-hole plate for tents.....	Oct. 28, 1873	631	208	4	460
	Brien, W. (See Brien, R. & W.)					
141,484	Brientnall, G. W., Lancaster, Pa. Shirt-collar fastener.....	Aug. 5, 1873	65	21	4	140
	Briggs, A. E. (See Briggs, J., W. H., & A. E.)					
	Briggs, C. C., et al. (See Skinner, H. M., assignor.)					
141,199	Briggs, E., Cleveland, Ohio. Cultivator.....	July 29, 1873	802	262	4	109
	Briggs, F. M. (See Thompson, J. G., assignor.)					
134,845	Briggs, G. W., New Haven, Conn. Die for capping screws.....	Jan. 14, 1873	326	104	3	46
139,111	Briggs, J., Toronto, Canada. Chimney and fire-place.....	May 20, 1873	586	184	3	568
145,087	Briggs, J. N., South Adams, Mass. Saw-set.....	Dec. 2, 1873	47	14	4	589
142,204	Briggs, J., W. H., & A. E., Newport, Ky. Locomotive head-light.....	Aug. 26, 1873	740	244	4	222
	Briggs, L. W. (See Briggs, O. P. & L. W.)					
143,056	Briggs, L. W., assignor of two-thirds interest to T. M. Curtiss and H. H. Ladd, Chicago, Ill. Device for raising sunken vessels.....	Sept. 23, 1873	655	224	4	328
136,696	Briggs, O. P. & L. W., assignors of half interest to G. W. Gillett, Chicago, Ill. Bung-bush.....	Mar. 11, 1873	314	104	3	279
137,757	Briggs, O. P. & L. W., said O. P. assignor to said L. W. Briggs, Chicago, Ill. Machine } for threading nuts..... }	Apr. 15, 1873	445	138 } 139 }	3	417
140,882	Briggs, R., Philadelphia, Pa. Crane.....	July 15, 1873	478	162	4	66
138,373	Briggs, S. A., Tidououte, Pa. Self-tamping torpedo.....	Apr. 29, 1873	1,026	323	3	482
	Briggs, W. H. (See Briggs, J., W. H., & A. E.)					
142,893	Brigham, C. H., assignor to self, G. F. Smith, Marlborough, S. Moore, and H. Rodgers, Sudbury, Mass. Method of forming soles of boots and shoes.....	Sept. 16, 1873	508	173	4	306
	Brigham, C. P., et al. (See Howard & Jackson, assignors.)..... (Reissue.)					
141,538	Bright, J. M., and E. Standt, Bernville, Pa. Planting-machine.....	Aug. 5, 1873	110	35	4	144
134,974	Bright, W., Saint Louis, Mo. Newspaper-file holder.....	Jan. 21, 1873	149	144	3	71
138,607	Brightman, N. P., New Bedford, Mass. Steam-generator.....	May 6, 1873	120	40	3	507
	Brill, G. M. (See Brill, J. G. & G. M.)					
145,839	Brill, J. G. & G. M., Philadelphia, Pa. Operating car-doors.....	Dec. 23, 1873	723	238	4	680
	Brilmayer, F. (See Shellenback & Brilmayer.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Brimble, E. (See Lane, J. W., assignor.)					
140, 460	Brimingham, G. B., Trenton, Tenn. Subsoil-plow.....	July 1, 1873	98	33	4	17
140, 183	Brinckmann, A., New York, N. Y. Self-closing faucet.....	June 24, 1873	699	219	3	696
140, 461	Bringier, M. S., Ascension Parish, La. Apparatus and process for extracting saccharine matter from sugar-cane.....	July 1, 1873	99	34	4	16
141, 316	Same.....Apparatus for extracting saccharine matter from cane, &c.....	July 29, 1873	913	299	4	118
6, 614	Bringman, G. E., Philadelphia, Pa. Knobs and plates.....(Design).....	Apr. 29, 1873			3	471
145, 619	Brinkerhoff, A. W., Upper Sandusky, Ohio. Tool for molding inkstands.....	Dec. 16, 1873	527	173	4	652
143, 120	Brinkerhoff, G. F., Bucyrus, Ohio. Stove-pipe connection.....	Sept. 23, 1873	703	241	4	332
5, 218	Brinkerhoff, J., Auburn, N. Y. Clothes-wringer.....(Reissue).....	Jan. 7, 1873	208	67	3	23
140, 004	Brinly, T. E. C., Louisville, Ky. Plow.....	June 17, 1873	516	164	3	674
142, 077	Brinser, E. C., assignor of one-half interest to S. C. Brinser, Middletown, Pa. Table-hinge.	Aug. 26, 1873	632	208	4	213
	Brinser, S. C. (See Brinser, E. C., assignor.)					
	Bristol Brass and Clock Company. (See Bradley, H. D., assignor.)					
5, 639	Bristol, C. B., New Haven, Conn. Snap-hook.....(Reissue).....	Nov. 4, 1873	173	58	4	492
140, 462	Bristol, H. C., assignor to self, W. D. Hart, and J. Clark, jr., East China, Mich. Water-feed for boilers.....	July 1, 1873	101	34	4	16
143, 612	Britt, J. L. and T. R., Raleigh, N. C. Churn.....	Oct. 14, 1873	199	67	4	405
	Britt, T. R. (See Britt, J. L. and T. R.)					
	Brittan, A. (See Whitcomb, J. B., assignor.)					
	Brittan, J. (See Whitcomb, J. B., assignor.)					
135, 764	Britton, R. G., Springfield, Vt. Child's carriage.....	Feb. 11, 1873	348	{ 111 112 }	{ 3 }	167
138, 785	Brizee, J., Alvarado, Cal. Clothes-line reel.....	May 13, 1873	264	90	3	531
	Broadaway, W., et al. (See Ruth, W. A., assignor.)					
	Broadbent, J. F. (See Cleary, D. M., assignor.)					
136, 964	Broadbooks, P., assignor of one-half interest to S. Lozier and E. F. Whitney, Batavia, N. Y. Wrench and bolt-cutter.....	Mar. 18, 1873	550	182	3	308
137, 821	Broadbooks, P., assignor of one-half interest to C. N. Grove, Batavia, N. Y. Pruning-shears.....	Apr. 15, 1873	502	156	3	422
144, 734	Broadbooks, P., assignor of one-half interest to S. Wakeman, Batavia, N. Y. Cutting-nippers, &c.....	Nov. 18, 1873	488	{ 165 166 }	{ 4 }	541
	Broadmeadow, J. P., Bridgeport, Conn. Molding for metal-casting.....(Extension).....	Nov. 29, 1873			4	557
136, 129	Broadnax, A., Mont Clair, N. J. Rendering-apparatus for fats, offal, &c.....	Feb. 25, 1873	694	{ 224 225 }	{ 3 }	219
	Broadwell, B. F., et al. (See Kersting, F., assignor.)					
	Broadwell, L. W. (See Michaels & Broadwell.)					
142, 987	Brobston, D., Chicago, Ill. Sand-sifter.....	Sept. 23, 1873	594	202	4	323
142, 988	Same.....Dredging-scraper.....	Sept. 23, 1873	595	202	4	323
135, 765	Brock, A. D., Washington, D. C. Steam water-elevator.....	Feb. 11, 1873	349	112	3	167
	Brock, J. W., et al. (See Lane, D., assignor).....(Two cases.)					
137, 758	Brock, O. W., Etna, Ohio. Sawing-machine.....	Apr. 15, 1873	449	139	3	418
140, 005	Brockett, E. L., Nelson, Ohio. Bed-bottom.....	June 17, 1873	517	164	3	674
142, 673	Brockett, D. E., Wheeling, W. Va. Railway-switch.....	Sept. 9, 1873	316	105	4	279
145, 986	Brocksmith, H., Saint Louis, Mo. Wagon hay-press.....	Dec. 30, 1873	878	285	4	703
140, 572	Brockway, M., jr., Angola, Ind. Carriage-seat fastener.....	July 8, 1873	213	71	4	37
141, 109	Brockway, W. E., assignor to W. L. Brockway, New York, N. Y. Restoring tinned sheet-iron.....	July 22, 1873	706		4	94
	Brockway, W. L. (See Brockway, W. E., assignor.)					
	Brodhead, J. A., administrator. (See Tufts, O.).....(Extension.)					
	Same.....same.....					
5, 333	Brodie, G., Plum Bayou, Ark. Metallic band for baling.....(Extension).....	Mar. 22, 1873			3	296
	Brodie, G., Plum Bayou, Ark., assignor to J. J. McComb, Liverpool, England. Cotton-bale tie.....(Reissue).....	Mar. 25, 1873	843	277	3	342
142, 894	Brodie, G., Plum Bayou, Ark. Bale-tie.....	Sept. 16, 1873	508	173	4	306
139, 863	Brombacher, C., Tarrytown, N. Y. Machine for seaming sheet-metal.....	June 17, 1873	400	125	3	664
	Bromley, J., & Sons. (See Bromley, J. H., assignor).....(Design).....					
6, 386	Bromley, J. H., assignor to J. Bromley & Sons, Philadelphia, Pa. Carpet.....(Design).....	Feb. 11, 1873			3	156
144, 949	Bromley, T. H., Stoneborough, Pa. Sleigh-brake.....	Nov. 25, 1873	678	230	4	567
136, 026	Bronson, E. D., Amsterdam, N. Y. Broom-bag.....	Feb. 18, 1873	587	193	3	199
144, 435	Bronson, H. M., Sandusky, Ohio. Implement for capping cartridges.....	Nov. 11, 1873	231	78	4	509
134, 511	Bronson, L., assignor to J. Brayley, Buffalo, N. Y. Horse-power.....	Jan. 7, 1873	9	4	3	8
139, 538	Brooke, J. M., Lexington, Va., assignor of one-half interest to T. T. Mumford. Apparatus for forcing water by direct condensation of air.....	June 3, 1873	79	27	3	615
134, 587	Brooke, W. M., Eaton, Ohio. Inkstand.....	Jan. 7, 1873	82	26	3	13
138, 608	Brookmann, A., Chicago, Ill. Button-fastening.....	May 6, 1873	121	40	3	508
135, 518	Brooks, B. G., Manchester, N. H. Apparatus for washing printed or bleached goods.....	Feb. 4, 1873	110	35	3	136
141, 691	Brooks, B. H., New Haven, Conn. Combined hook and hasp.....	Aug. 12, 1873	262	84	4	164
	Brooks, C. H. (See Smillie & Brooks.)					
	Brooks, E. F. (See Seal & Brooks.)					
	Same.....(See Seal, C. E., assignor.)					
	Same.....same.....(Reissue.)					
144, 735	Brooks, E. F., Baltimore, Md., assignor to self and C. E. Seal, Winchester, Va. Automatic lubricating water and gas cock.....	Nov. 18, 1873	489	166	4	541
	Brooks, E. J. (See Brooks, F. W., assignor.)					
	Same.....(See Hamilton, F. C., assignor.)					
139, 764	Same.....New York, N. Y. Combined label and seal for locks.....	June 10, 1873	308	95	3	649
141, 110	Brooks, F. W., assignor to E. J. Brooks, New York, N. Y. Seal for locks.....	July 22, 1873	707	236	4	94
	Brooks, G. D., et al. (See Brooks, W. D., assignor.)					
	Same.....(See Spence, J. F., assignor.)					
140, 678	Brooks, G. D., et al., assignor to self and M. C. Brooks, Baltimore, Md. Sheet-metal seaming-machine.....	July 8, 1873	300	101	4	44
142, 674	Brooks, G. W., Bloomington, Ill. Blind-slat fastener.....	Sept. 9, 1873	317	105	4	279
	Brooks, H. W., et al. (See Shaw, A. B., assignor.)					
135, 767	Brooks, J., assignor to self and C. Howard & Co., North Bridgewater, Mass. Machine for turning sewing-machine needle-blanks.....	Feb. 11, 1873	350	{ 112 113 }	{ 3 }	167
135, 766	Brooks, J. M., Woodbury, Ga. Cotton-planter.....	Feb. 11, 1873	350	112	3	167
136, 697	Brooks, J. M., jr., Griffin, Ga. Cotton-press.....	Mar. 11, 1873	315	104	3	279
	Brooks, J. W., trustee. (See Ellis, G. W., assignor).....(Reissue.)					
	Same.....(See Ellis & Glidden, assignors).....(Reissue.)					
	Same.....(See Fairfield, H. P., assignor.)					
	Same.....(See Glidden & Fairfield, assignors.)					
	Same.....(See Glidden, C. W., assignor.)					
	Same.....(See Helms, C. H., assignor).....(Reissue.)					
	Same.....(See Knowlton, A., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette	
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145, 485	Brooks, M., Chicago, Ill. Drawing-knife.....	Dec. 16, 1873	405	133	4	642
	Brooks, M. C. (See Brooks, G. D., assignor.)					
	Brooks, M. C., et al. (See Brooks, W. D., assignor.)					
	Same..... (See Spence, J. F., assignor.)					
142, 434	Brooks, M. D., Boston, Mass. Rivet-setting machine.....	Sept. 2, 1873	97	32	4	250
	Brooks, S. R. (See Mulloony, Cope & Brooks.)					
135, 768	Brooks, T., Canton, Ohio. Manufacture of steel.....	Feb. 11, 1873	352	.....	3	167
144, 015	Brooks, W. C., Stoneham, Pa. Car-coupling.....	Oct. 28, 1873	599	198	4	457
137, 888	Brooks, W. D., assignor to M. C. and G. D. Brooks, Baltimore, Md. Soldering-machine.....	Apr. 15, 1873	556	174	3	426
139, 539	Same..... same..... same.....	June 3, 1873	80	28	3	615
139, 763	Same..... same..... same.....	June 10, 1873	307	95	3	649
140, 679	Same..... same..... same.....	July 8, 1873	301	101	4	44
135, 318	Brooks, W. P., Lawrence, Kans. Washing-machine.....	Jan. 28, 1873	768	248	3	109
138, 374	Brooks, W. P., and J. D. Hartzell, Ozawie, Kans. Washing-machine.....	Apr. 29, 1873	1,027	324	3	482
140, 344	Same..... Clothes-wringer.....	July 1, 1873	9	3	4	8
	Brooks, W. P. B. (See Moulton, J., assignor.)					
139, 494	Brooks, W. R., Phelps, N. Y. Clothes-washer.....	June 3, 1873	46	14	3	612
145, 928	Brosseau, V., Saint Sebastian, Canada. Manufacture of imitation medicated wines.....	Dec. 30, 1873	827	.....	4	699
145, 719	Brotherhood, P., Notting-Hill, England. Triple-cylinder engine.....	Dec. 23, 1873	624	205	4	672
137, 412	Browell, J., San Francisco, Cal. Chimney.....	Apr. 1, 1873	118	39	3	366
	Brown, M. P. (See Allen, Brown & Moulthrop.)					
6, 878	Brower, B., New York, N. Y. Inkstand..... (Design.)	Sept. 9, 1873	.....	.....	4	270
6, 879	Same..... same..... same.....	Sept. 9, 1873	.....	.....	4	270
141, 421	Same..... Water-bowl.....	Aug. 5, 1873	11	3	4	136
141, 422	Same..... Copying-press table.....	Aug. 5, 1873	12	3	4	136
144, 825	Same..... Inkstand.....	Nov. 25, 1873	577	196	4	558
136, 210	Brower, H. L., New York, N. Y. Burglar-alarm.....	Feb. 25, 1873	760	246	3	225
140, 883	Same..... Automatic toy.....	July 15, 1873	479	162	4	66
143, 121	Brower, H. L., New York, N. Y., assignor to J. D. Brower, Yonkers, N. Y. Automatic toy-dancer.....	Sept. 23, 1873	704	241	4	332
144, 252	Brower, I. V., and J. C. Higgins, Millstone, N. J. Walk-edger.....	Nov. 4, 1873	72	23	4	484
	Brower, J. D. (See Brower, H. L., assignor.)				4	332
134, 846	Brower, S. P., Glen's Falls, N. Y., assignor of one-half interest to W. H. Knox. Machine for sawing laths.....	Jan. 14, 1873	326	104	3	46
143, 325	Brower, S. P., and W. H. Knox, Glen's Falls, N. Y. Lath-machine.....	Sept. 30, 1873	879	300	4	362
138, 473	Brown, A., Fond du Lac, Wis. Medical compound.....	May 6, 1873	7	.....	3	498
136, 900	Brown, A. C., Chicago, Ill. Hanging-bracket or shelf.....	Mar. 18, 1873	498	165	3	303
	Brown, A. L., et al. (See Dustin, J. E., assignor.)					
138, 375	Brown, A. P., Upperville, Va. Vacuum-pan.....	Apr. 29, 1873	1,028	324	3	482
140, 006	Brown, A. P., New York, N. Y. Globe-valve.....	June 17, 1873	517	164	3	674
138, 849	Brown, C. A., Troy, N. Y. Paper-collar.....	May 13, 1873	352	109	3	536
136, 641	Brown, C. B., New Rochelle, N. Y. Clothes-line pole.....	Mar. 11, 1873	271	91	3	276
141, 031	Brown, C. B., assignor to self and A. Woodman, Lewiston, Me. Roller-clearer for spinning-machines.....	July 22, 1873	636	214	4	84
145, 620	Brown, C. D., and E. B. Denison, Portland, Me. Manufacture of paper-pulp.....	Dec. 16, 1873	528	.....	4	652
142, 372	Brown, C. F., Bristol, R. I. Machine for rolling round-tapered bars.....	Sept. 2, 1873	46	16	4	246
137, 174	Brown, C. H., and J. J. Thomas, Philadelphia, Pa. Apparatus for exhausting and washing gas.....	Mar. 25, 1873	747	248	3	335
135, 074	Brown, C. J., Plymouth, N. H. Safety-apparatus for lamps.....	Jan. 21, 1873	538	175	3	78
139, 765	Brown, C. M., Baltimore, Md. Ditching-machine.....	June 10, 1873	309	96	3	649
135, 769	Brown, C. N., Providence, R. I. Machine for gumming saws.....	Feb. 11, 1873	352	113	3	167
144, 950	Same..... Writing-tablet.....	Nov. 25, 1873	679	230	4	567
	Brown, D. (See Smith & Ogden, assignors.)					
140, 993	Brown, D., assignor to self and W. E. George, Wrentham, Mass. Hat-pressing machinery.....	July 22, 1873	602	204	4	85
145, 783	Brown, D., Clinton, Tex. Wheel for vehicles.....	Dec. 23, 1873	680	222	4	677
	Brown, E. (See McKinnon, D., assignor.)					
136, 358	Brown, E., Wappinger's Falls, N. Y. Band comb.....	Mar. 4, 1873	4	2	3	245
142, 675	Brown, E. C., Crawfordsville, Ind. Corn-planter.....	Sept. 9, 1873	318	106	4	279
	Brown, E. D. (See Nichols & Brown.)					
	Brown, F. B. (See Rowe & Brown.)					
144, 598	Brown, F. E., Pawtucket, R. I. Stud and button.....	Nov. 18, 1873	375	126	4	532
138, 125	Brown, F. E., and J. R. Shangle, Hightstown, N. J. Corn-sheller.....	Apr. 22, 1873	778	248	3	454
	Brown, F. W. (See Bean, J. H., assignor.) (Reissue.)					
141, 626	Brown, F. W., Cincinnati, O. Tucker for sewing-machines.....	Aug. 12, 1873	206	65	4	160
139, 364	Brown, G. B., assignor to self and L. J. Bazzoni, Newburgh, N. Y. Carriage-protector.....	May 27, 1873	823	263	3	595
142, 895	Brown, G. W., Buffalo, N. Y. Spring bed-bottom.....	Sept. 16, 1873	509	174	4	306
	Brown, Harris & Hopkins. (See Bean & Mills, assignors.)					
	Brown, H. (See Smith & Brown.) (Design.)					
142, 896	Brown, H. F., Indianapolis, Ind. Coal and rock cutting machine.....	Sept. 16, 1873	510	174	4	306
5, 273	Brown, H. L., Adrian, Mich. Hand-car..... (Reissue.)	Feb. 11, 1873	446	145	3	174
5, 274	Same..... same..... (Reissue.)	Feb. 11, 1873	447	145	3	174
139, 292	Brown, H. L., Middletown, Conn. Automatic fire-alarm.....	May 27, 1873	770	244	3	591
145, 332	Same..... Burglar-alarm.....	Dec. 9, 1873	269	90	4	619
139, 864	Brown, H. O., Castleton, Vt. Composition-dressing for roofs.....	June 17, 1873	401	.....	3	664
139, 363	Brown, H. W., Warren, Pa. Buckle for hanging reciprocating saws.....	May 27, 1873	822	263	3	595
139, 233	Brown, I., Glenville, Md. Reciprocating steam-engine and saw-mill combined.....	May 27, 1873	716	{ 225 226 }	3	586
144, 055	Brown, I., Edinburgh, New Britain. Watering streets and roads.....	Oct. 28, 1873	632	208	4	460
141, 200	Brown, I. F., New London, Conn. Washing-machine.....	July 29, 1873	803	262	4	109
142, 373	Brown, J., Brooklyn, N. Y. Loom shuttle.....	Sept. 2, 1873	46	16	4	246
145, 148	Brown, J., Southampton, Ill. Sower attachment to plows.....	Dec. 2, 1873	101	34	4	593
134, 637	Brown, J. B., Washington, D. C. Bag-holder.....	Jan. 7, 1873	130	42	3	17
145, 621	Brown, J. C. H., Jersey City, N. J. Chimney-top.....	Dec. 16, 1873	528	173	4	652
	Brown, J. H. (See Douglass & Brown.)					
141, 485	Brown, J. H., Lynn, Mass. Coal-hod.....	Aug. 5, 1873	66	21	4	140
	Brown, J. L. (See Brown, T. A. & J. L.)					
138, 376	Brown, J. L., Brookville, Pa. Slide-valve.....	Apr. 29, 1873	1,029	324	3	482
141, 423	Brown, J. M., Lynn, Mass. Cleaning wool on pelts.....	Aug. 5, 1873	12	.....	4	136
	Brown, J. O. (See Bayliss, Brown & Lomont.)					
	Brown, J. O., et al. (See Hodges, P. F., assignor.)					
142, 143	Brown, J. R., assignor to self and H. P. Huntoon, Cambridgeport, Mass. Pipe tongs.....	Aug. 26, 1873	691	227	4	218
144, 253	Same..... same.....	Nov. 4, 1873	72	23	4	484
145, 929	Same..... same.....	Dec. 30, 1873	827	269	4	699
145, 840	Brown, J. R., New Haven, Conn., assignor of one-half interest to H. A. Stearns, Lincoln, R. I. Process for purifying and bleaching tallow, lard, &c.....	Dec. 23, 1873	725		4	680

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 519	Brown, J. R., and W. A. Foskett, New Haven, Conn. Low-water alarm for steam-boilers.	Feb. 4, 1873	111	36	3	136
137, 653	Same.....Filter.....	Apr. 8, 1873	340	105	3	396
	Brown, J. S. (See Hull & Brown.)					
	Brown, J. W. (See Smith, J. G., assignor.)					
138, 377	Brown, J. W., Butlerville, Ind., and H. B. West, Put-in-Bay, Ohio. Gas-apparatus.....	Apr. 29, 1873	1, 029	324	3	482
	Brown, K. (See Carr, W., assignor.)					
	Brown, L., et al. (See Bancroft, L., assignor.)					
	Brown, N. (See Newman & Brown.)					
	Brown, N. B., et al. (See Hart, J., assignor.)					
145, 622	Brown, O. B., and H. G. Carey, Malden, Mass. Music blackboard.....	Dec. 16, 1873	529	173	4	652
138, 557	Brown, O. C., Iberia, Ohio. Apparatus for loading and unloading baggage and freight from cars.....	May 6, 1873	81	26	3	504
143, 433	Brown, O. L., Hopkinton, Mass. Hemmer.....	Oct. 7, 1873	33	12	4	383
	Brown, P. F. (See Young, C. A., assignor.)					
145, 088	Brown, R. A., Oakland, Miss. Plow.....	Dec. 2, 1873	48	15	4	589
142, 078	Brown, R. H., Linneus, Mo. Heating-stove.....	Aug. 26, 1873	633	208	4	213
142, 079	Same.....same.....	Aug. 26, 1873	634	208	4	213
142, 080	Same.....Reservoir cooking-stove.....	Aug. 26, 1873	635	209	4	213
145, 089	Same.....Cooking-stove.....	Dec. 2, 1873	49	15	4	589
143, 959	Brown, R. T., Newport, Ky. Bucket.....	Oct. 28, 1873	546	181	4	453
	Brown, S. (See Walker & Brown.)					
143, 960	Brown, T. A. and J. L., Roanoke, Ill. End-gate for wagons.....	Oct. 28, 1873	546	181	4	453
136, 027	Brown, W., Butte des Morts, Wis. Harrow.....	Feb. 18, 1873	588	193	3	199
141, 317	Brown, W., Saint Louis, Mo. Machine for dressing and crozing barrels.....	July 29, 1873	915	300	4	119
	Brown, W. B. (See Parsons, W., assignor.)					
137, 529	Brown, W. F., assignor of two-thirds interest to W. F. Coombs and B. Housley, Hardin County, Ky. Device for cleaning wells.....	Apr. 8, 1873	237	72	3	387
	Brown, W. G., et al. (See Dustin, J. E., assignor.)					
5, 587	Brown, W. G., and J. W. Jedkins, Monmouth, Me. Car-coupling attachment (Reissue).....	Oct. 7, 1873	143	47	4	392
135, 262	Same.....same.....	Jan. 28, 1873	723	231	3	105
144, 381	Brown, W. H., Worcester, Mass., and D. F. Williams, assignors to Bailey Tool Company, Woonsocket, R. I. Bench-plane.....	Nov. 11, 1873	185	63	4	505
136, 698	Brown, W. J., Momence, Ill. Apparatus for hoisting and dumping loaded wagons.....	Mar. 11, 1873	315	104	3	280
143, 493	Brown, W. S., Norwood, Ill. Farm-gate.....	Oct. 7, 1873	82	28	4	387
142, 897	Brownback, P. W., Limerick Station, Pa. Sausage stuffer.....	Sept. 16, 1873	512	174	4	306
135, 770	Browne, A. W., Bloomfield, N. J., assignor to Althof Bergman & Co., New York, N. Y. Automatic toy.....	Feb. 11, 1873	353	113	3	167
135, 884	Browne, C. B., Geneseo, Ill. Carpet-fastener.....	Feb. 18, 1873	471	152	3	190
143, 324	Browne, J. W., Brooklyn, N. Y. Weather-strip.....	Sept. 30, 1873	878	300	4	362
136, 410	Browne, M. A., Chicago, Ill. Attachment for sewing-machine tables.....	Mar. 4, 1873	50	18	3	249
144, 436	Browne, W. F., New York, N. Y. Balloon advertising.....	Nov. 11, 1873	232	78	4	509
136, 581	Browne, W. H., and W. M. Pegram, Baltimore, Md. Car-brake.....	Mar. 11, 1873	221	74	3	272
143, 402	Brownell, C., Troy, N. Y., assignor of one-half interest to P. J. Marsh, Lansingburgh, N. Y. Stove platform.....	Oct. 7, 1873	5	2	4	381
138, 070	Brownlee, G., Princeton, Ind. Lamp.....	Apr. 22, 1873	737	233	3	451
140, 463	Brownlee, T., Fairbury, Ill. Trace-buckle.....	July 1, 1873	102	34	4	16
136, 811	Brubaker, A. M., Millersville, assignor of two-thirds interest to W. Crompton and A. B. Greenwalt, Lancaster, Pa. Hitching-strap.....	Mar. 18, 1873	425	141	3	298
136, 642	Brubaker, A. M., and B. R. Witmer, Millersville, Pa. Bee-hive.....	Mar. 11, 1873	272	91	3	276
	Bruce, D. W. (See Herriet, J., assignor.) (Design.)					
	Bruce, D. W. (See Illeburgh, H., assignor.) (Design.)					
	Bruce, D. W. (See Ruthven, E. C., assignor.) (Design.)					
139, 365	Bruce, D. W., New York, N. Y. Printing-type.....	May 27, 1873	824	{ 263 } { 264 }	{ 3 }	595
137, 413	Brueck, G., New York, N. Y. Fans.....	Apr. 1, 1873	119	39	3	367
139, 112	Brueck, O., Union Hill, N. J. Rocking-chair fan.....	May 20, 1873	587	184	3	568
134, 638	Brüen, J. T., Brooklyn, N. Y. Collar.....	Jan. 4, 1873	130	42	3	17
	Bruen, L. B. (See Barbour, T. P., assignor.)					
	Bruff, R. P. (See Swan, J., assignor.) (Reissue.)					
138, 314	Bruhl, S., New York, N. Y. Doublet stones.....	Apr. 29, 1873	979	307	3	478
	Bruhn, D. (See Fischer & Bruhn.)					
	Brumbaugh, A. B. (See Paul, J. A., assignor.)					
	Brumbaugh, D. H. (See McCool, W. C., assignor.)					
	Brummel, A. (See Follett & Brummel.)					
6, 774	Brundage, J. T., Niagara Falls, N. Y. Fan..... (Design.)	July 15, 1873			4	58
	Brundred, W. J. (See Lamason, B. P., assignor.)					
	Brune, H., et al. (See Buckner, C., assignor.)					
134, 588	Brunjes, P. O., and A. Benneckendorf, Hoboken, N. J. Machine for cutting sugar into blocks.....	Jan. 7, 1873	83	26	3	13
140, 464	Same.....same.....	July 1, 1873	102	35	4	17
141, 201	Same.....same.....	July 29, 1873	803	263	4	109
139, 041	Brunker, W. A., Farmersburgh, Ind. Lifting-jack.....	May 20, 1873	520	164	3	563
145, 486	Bruno, T., Saginaw, Mich. Lath-machine.....	Dec. 16, 1873	406	{ 133 } { 144 }	{ 4 }	642
138, 609	Brunswick, E., Chicago, Ill. Billiard-table.....	May 6, 1873	122	40	3	508
143, 961	Brunswick, S., and H. Borlinghaus, sr., said Borlinghaus assignor to said Brunswick, Saint Louis, Mo. Billiard-table cushion.....	Oct. 28, 1873	547	181	4	453
	Brunt, S. W. (See Stevens, S. M., assignor.)					
136, 028	Brush, A. G., Susquehanna Depot, Pa. Potato-digger.....	Feb. 18, 1873	589	194	3	199
138, 126	Brush, J. N., Olmstead County, Minn. Car-brake.....	Apr. 22, 1873	779	249	3	454
	Brush, L. (See Jebb & Brush.)					
137, 175	Brusie, R., New York, N. Y. Portable fountain and lawn-sprinkler.....	Mar. 25, 1873	748	248	3	335
143, 746	Bruson, W. C., Chicago, Ill. Anti-freezing fire-extinguisher.....	Oct. 21, 1873	345	115	4	426
138, 786	Bruton, D. R., Concord, N. C. Clover-harvester.....	May 13, 1873	295	91	3	531
134, 847	Bryan, E. F., Savannah, Ga. Crib-attachment for bedsteads.....	Jan. 14, 1873	328	104	3	46
140, 402	Bryan, L., New York, N. Y. Toy.....	July 1, 1873	54	19	4	12
5, 392	Bryant, A. H., Chicago, Ill. Egg-carrier..... (Reissue.)	May 6, 1873	236	74	3	516
5, 293	Same.....New York, N. Y. Egg-carrier..... (Reissue.)	Feb. 25, 1873	889	286	3	235
139, 540	Same.....Chicago, Ill. Egg-carrier.....	June 3, 1873	81	28	3	615
140, 241	Bryant, B. S., Hanson, Mass. Mode of finishing shoe-soles.....	June 24, 1873	743	234	3	700
134, 848	Bryant, H. H., Boston, Mass. Loom-shuttle.....	Jan. 14, 1873	328	105	3	46
139, 451	Same.....Construction of buildings.....	June 3, 1873	4	1	3	609
145, 623	Bryant, J. A., Pottsville, Pa. Device for removing snow from railways.....	Dec. 16, 1873	531	174	4	652
	Bryant, J. M. (See Bryant, S. H. and J. M., and H. L. McGaw.)					
44, 736	Bryant, S. H. and J. M., and H. L. McGaw, Pittsburgh, Pa. Hemmer for sewing-machines.....	Nov. 18, 1873	490	166	4	541

Alphabetical list of patentees for the year 1873—Continued.

No	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Bryant, W. G., <i>et al.</i> (See Bancroft, L., assignor.)					
	Bryant, W. H. (See Healy, P. H., assignor.)					
	Brydges, J. G. (See Owen & Brydges.)					
141, 111	Bryer, J. Q., Wilmington, Del. Wheel for vehicles	July 22, 1873	708	236	4	94
141, 627	Bryson, J., Quincy, Ill. Platform-scales	Aug. 12, 1873	207	65	4	160
134, 849	Bubser, M., Jersey City, N. J. Sliding support for clothes-lines	Jan. 14, 1873	329	105	3	46
141, 259	Same. Wrench	July 29, 1873	863	282	4	114
141, 318	Buchanan, G., Washington, Pa. Reclining-chair	July 29, 1873	916	300	4	119
144, 437	Buchanan, G. G., Cotton Plant, Miss. Churn	Nov. 11, 1873	233	78	4	509
	Bucher, J. R., <i>et al.</i> (See Gibbs, L., assignor.) (Reissue.)					
142, 610	Buckheit, B. W., East Liverpool, Ohio. Fastening for railway-rail joints	Sept. 9, 1873	263	86	4	275
145, 393	Bucholz, A., Janesville, Wis. Wheel for vehicles	Dec. 9, 1873	317	107	4	623
134, 512	Buchtel, J., Portland, Oreg. Photographic plate-holder	Jan. 7, 1873	10	4	3	8
145, 487	Same. Photographic background	Dec. 16, 1873	407	134	4	642
144, 887	Buck, E., and E. W. Kirk, Cincinnati, Iowa. Cherry-stoner	Nov. 25, 1873	629	214	4	563
139, 234	Buck, E. A., Bangor, Me. Moccasin-boot	May 27, 1873	717	226	3	587
136, 029	Buck, H., Polo, Ill. Apparatus for elevating and unloading hay	Feb. 18, 1873	589	194	3	200
136, 359	Same. Railway-car	Mar. 4, 1873	5	2	3	246
136, 360	Same. Bolster-spring for vehicles	Mar. 4, 1873	6	2	3	246
	Buck, I. D. (See Garsed & Buck.)					
136, 211	Buck, M., Lebanon, N. H. Tenoning-machine	Feb. 25, 1873	761	246	3	225
145, 046	Buck, M., North Rush, N. Y. Wagon-jack	Dec. 2, 1873	4	1	4	586
	Buckalew, I. S. (See Ferris, J. L., assignor.)					
142, 205	Buckingham, T. L., Philadelphia, Pa. Tooth plugger	Aug. 26, 1873	741	244	4	222
	Buckland, A. A., <i>et al.</i> (See Holt & Marshall, assignors.)					
	Buckland, E. H., <i>et al.</i> (See Holt & Marshall.)					
	Buckland, T. A. (See Thornton & Buckland.) (Reissue.)					
136, 030	Buckley, C., West Meriden, Conn. Curtain-fixture	Feb. 18, 1873	590	194	3	200
140, 345	Buckley, S., and P. H. Lawrence, Lawrenceburgh, Pa. Oil-tool extractor	July 1, 1873	10	3	4	9
144, 826	Buckley, T. L., Mankato, Minn. Wrench	Nov. 25, 1873	577	197	4	558
143, 613	Bucklin, C. S., Red Bank, N. J. Apparatus for filling cans with tomatoes, &c.	Oct. 14, 1873	199	67	4	405
144, 827	Bucklin, E., jr., assignor to C. E. Davis and F. A. Newell, Pawtucket, R. I. Hose-wrench	Nov. 25, 1873	578	197	4	559
138, 127	Buckman, A. & E., Brooklyn, N. Y. Self-closing faucet	Apr. 22, 1873	779	249	3	454
	Buckman, E. (See Buckman, A. & E.)					
	Bucknam, C. H. (See Higgins, S., assignor.)					
142, 766	Bucknam, H. C., Bucksport, Me., assignor to J. P. Bass, Bangor, Me. Device for cleaning surface-condensers	Sept. 16, 1873	406	137	4	297
138, 474	Buckner, C., assignor of part interest to H. Brune, J. Reiners, J. H. A. Ludwig, and J. M. Ward, San Francisco, Cal. Wave-power	May 6, 1873	8	3	3	498
141, 756	Buckner, R. B., Gilroy, Cal. Car-coupling	Aug. 12, 1873	315	103	4	169
143, 747	Buckner, W. P., Union County, Tenn. Wagon-brake	Oct. 21, 1873	346	115	4	426
143, 057	Budd, J. C., Union Township, N. J. Piston-packing	Sept. 23, 1873	656	225	4	328
	Budenburg, A. (See Buss, E., assignor.)					
138, 315	Budge, H. T., and C. W. Russell, Cedar Falls, Iowa. Bag-holder weighing-scales	Apr. 29, 1873	980	308	3	478
142, 676	Budlong, S., Providence, R. I. Washing-machine	Sept. 9, 1873	318	106	4	279
140, 610	Buell, E., and J. W. Lilley, assignors to L. Siebert and J. W. Lilley, Columbus, Ohio. Letter file and binder	July 8, 1873	246	83	4	40
	Buffalo Dental Manufacturing Company. (See Hayes, G. E., assignor.)					
145, 394	Buffington, C. W., Cleveland, Ohio. Steering-apparatus for vessels	Dec. 9, 1873	318	108	4	623
	Buffum, D. (See Wells, W., assignor.)					
144, 502	Buford, A. G., assignor of one-half interest to A. J. McConnico and H. L. Duncan, Water Valley, Miss. Cotton-bale tie	Nov. 11, 1873	284	96	4	513
141, 990	Bugbee, G. W., assignor to J. A. Fay & Co., Cincinnati, Ohio. Device for setting saw-teeth	Aug. 19, 1873	531	176	4	195
140, 007	Buhler, M., Lamoille, Ill. Shipping and show case for boots and shoes	June 17, 1873	518	165	3	674
142, 767	Büller, J., New York, N. Y. Vapor-bath	Sept. 16, 1873	406	137	4	297
140, 763	Bull, D., assignor to self and J. H. Holmes, Amboy, Ill. Miter-machine	July 15, 1873	376	128	4	58
5, 668	Bull, J., Galesburgh, Ill., assignor to Van Wagoner & Williams, New York, N. Y. Gate-latch	Nov. 25, 1873	761	257	4	574
	Bullard, L., Readville, Mass., assignor of one-half interest to J. B. Warren, Boston, Mass. Capping piano-hammers	Apr. 22, 1873	670	212	3	445
140, 611	Bullard, J. H., assignor of one-half interest to A. W. Page, Chicopee Falls, Mass. Manufacture of knitting-machine needles	July 8, 1873	248	84	4	40
145, 395	Bullard, W. A., Kalamazoo, Mich. Lubricator for car-wheels	Dec. 9, 1873	319	108	4	623
143, 434	Bullitt, H. M., Louisville, Ky. Plow-carriage	Oct. 7, 1873	33	12	4	383
145, 333	Bullock, J., Windsor, N. Y. Carriage-spring	Dec. 9, 1873	270	90	4	619
136, 812	Bullock, M. C., New York, N. Y., assignor of one-fourth interest to S. E. Griscom, Mahanoy Plane, Pa. Safety-clamp for rock-drill rods	Mar. 18, 1873	426	141	3	298
143, 873	Bulman, A., Newburgh, N. Y. Means of raising floating timber and loading vessels therewith	Oct. 21, 1873	453	152	4	435
139, 042	Bunch, G., Bonnot's Mill, Mo. Stock for drilling or tapping instruments	May 20, 1873	520	164	3	563
141, 692	Bunch, W. H., Windsor, N. C. Rotary churn	Aug. 12, 1873	262	85	4	164
137, 654	Bundy, N. H., New York, assignor to self and A. F. Weaver, Brooklyn, N. Y. Balanced valve	Apr. 8, 1873	341	105	3	396
145, 553	Bunker, G. V. & W. L., Yankton, Dak. Wire mattress-frame	Dec. 16, 1873	474	155	4	648
137, 286	Bunker, R., Hudson, Wis. Draft-elevator	Apr. 1, 1873	6	2	3	357
	Bunker, W. L. (See Bunker, G. V. & W. L.)					
144, 828	Bunnell, A. W., Linesville, Pa. Mop-wringer	Nov. 25, 1873	578	197	4	559
6, 779	Bunnell, G. W., assignor to C. Rogers & Brothers, West Meriden, Conn. Casket-handle tip	July 22, 1873			4	85
141, 757	Bunster, C. E. W., Valparaiso, Chili. Elevated wire-way	Aug. 12, 1873	316	103	4	169
136, 411	Bunster, H. B., New York, N. Y. Cigar-bunching machine	Mar. 4, 1873	51	18	3	249
5, 480	Buntin, G., Boston, Mass. Design for end-frames of car-seats	July 8, 1873	367	124	4	49
138, 850	Same. Billiard-table	May 13, 1873	352	109	3	536
141, 539	Same. same	Aug. 5, 1873	112	35	4	144
144, 951	Burch, J., and B. Webb, Warren, N. Y. Clothes-drier	Nov. 25, 1873	680	230	4	567
144, 599	Burch, J. A., Buffalo, N. Y. Picture-frame	Nov. 18, 1873	375	127	4	532
	Burch, J. T. (See Cochran, W. A., assignor.)					
136, 361	Burch, N., North Fairfield, Ohio. Plow	Mar. 4, 1873	6	2	3	246
139, 941	Burch, W. H., Port Gibson, Miss. Turn-table	June 17, 1873	469	147	3	669
136, 485	Burchardt, C. T., New York, N. Y. Centrifugal machine	Mar. 4, 1873	115	38	3	255
	Burdett, C. Company. (See Sorensen, A. J., assignor.)					
5, 485	Burdett, R., Erie, Pa. Reed-organ	July 15, 1873	587	198	4	75
135, 687	Same. same	Feb. 11, 1873	286	90	3	162
144, 382	Same. same	Nov. 11, 1873	186	64	4	505
144, 056	Burdick, H. J., and C. S. Fuller, Oswego, N. Y. Middlings-purifier	Oct. 28, 1873	632	208	4	460
146, 042	Burdick, H. M., and M. R. Flanders, Ilion, N. Y. Holdback for vehicles	Dec. 30, 1873	924	299	4	707

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
137, 414	Burdick, S. P., New York, N. Y. Wood-screw.....	Apr. 1, 1873	120	39	3	367
135, 520	Burdick, O. C., assignor to self and R. Plumb, Buffalo, N. Y. Cutter-head for pointing the heads of bolts.....	Feb. 4, 1873	112	36	3	136
5, 640	Burdon, W., Brooklyn, N. Y. Steam vacuum pump..... (Reissue)...	Nov. 4, 1873	173	58, 59	4	492
5, 641	Same..... (Reissue).....	Nov. 4, 1873	174	59	4	493
135, 198	Same.....	Jan. 28, 1873	660	213	3	101
135, 199	Same.....	Jan. 28, 1873	661	213	3	101
135, 200	Same.....	Jan. 28, 1873	662	213	3	101
135, 201	Same.....	Jan. 28, 1873	663	214	3	101
135, 202	Same.....	Jan. 28, 1873	664	214	3	101
135, 203	Same..... Steam vacuum pump, operated by exhaust steam.....	Jan. 28, 1873	665	{ 214 } 215	3	101
139, 235	Same..... Steam vacuum pump.....	May 27, 1873	718	226	3	587
141, 540	Same.....	Aug. 5, 1873	113	35, 36	4	144
138, 851	Buren, F. P., Trenton, Mo., assignor of one-half interest to S. McGee, Martinsburgh, Iowa. Shank for boots, &c.....	May 13, 1873	353	110	3	536
144, 254	Burfit, C., New Wimbledon, England. Composition for removing and preventing incrustation in steam-boilers.....	Nov. 4, 1873	73	.....	4	484
134, 589	Burge, J. M. (See Rife, O. C., assignor.)	Jan. 7, 1873	85	27	3	14
141, 319	Burgess, A., Hartford, Conn. Magazine fire-arm.....	July 29, 1873	917	300	4	119
141, 320	Burgess, C., Portsmouth, Ohio. Manufacture of refined cast iron.....	July 29, 1873	918	.....	4	119
143, 874	Burgess, C., Portsmouth, Ohio. Manufacture of cast iron for car-wheels.....	Oct. 21, 1873	454	.....	4	435
144, 737	Burgess, H., Royer's Ford, Pa. Purifying water from mines.....	Nov. 18, 1873	490	.....	4	541
145, 784	Burgess, J., Zanesville, Ohio. Furnace for heating soldering-irons.....	Dec. 23, 1873	681	223	4	677
144, 952	Burgess, R. O., and S. La Rhett, Providence, R. I. Mordant for dyeing.....	Nov. 25, 1873	680	.....	4	568
137, 822	Burghardt, J. M., Great Barrington, Mass. Water-wheel gate.....	Apr. 15, 1873	502	157	3	422
135, 521	Burgner, A. C. and G. F., Charleston, Ill. Corn-planter.....	Feb. 4, 1873	113	36	3	136
138, 128	Burgner, G. F. (See Burgner, A. C. and G. F.)	Apr. 22, 1873	780	249	3	454
141, 541	Burgner, J. C., Poplar Creek, Miss. Washing-machine.....	Aug. 5, 1873	114	36	4	144
143, 403	Burke, J., Boston, Mass. Corset-clasp.....	Oct. 7, 1873	5	2	4	381
141, 202	Burke, S. G., Chambers Court-House, Ala. Portable fence.....	July 29, 1873	808	264	4	109
144, 188	Burkhardt, J. G., Brooklyn, N. Y. Car replacer.....	Nov. 4, 1873	13	4	4	479
137, 592	Burkhart, J., Brookville, Ind. Grapple.....	Apr. 8, 1873	289	90	3	392
139, 366	Burleigh Rock Drill Company. (See Towne & Bailey, assignors.)	May 27, 1873	824	264	3	595
141, 542	Burnap, N. C., Argusville, N. Y. Shoulder-brace.....	Aug. 5, 1873	114	36	4	144
136, 965	Burnett, H. K., Poughkeepsie, N. Y. Baling-press.....	Mar. 18, 1873	551	182	3	308
137, 759	Burnett, W., San Francisco, Cal. Hydrodynamic steam-engine.....	Apr. 15, 1873	449	140	3	418
145, 149	Burney, F., Faversham, Great Britain, assignor to T. S. Pope and W. S. Colvin. Manufacture of gunpowder.....	Dec. 2, 1873	102	34	4	593
144, 187	Burnham, A., Revere, Mass. Machine for cutting the heads of fence-pickets.....	Nov. 4, 1873	13	3	4	479
138, 732	Burnham, A. H., Bridgeton, Me. Soldering iron.....	May 13, 1873	249	77	3	527
136, 901	Burnham, A. M., Lynn, Mass. Boot and shoe sole stamp.....	Mar. 18, 1873	498	165	3	303
6, 746	Burnham, M. M., and J. B. Oaks, Syracuse, N. Y. Advertising-frame..... (Design).....	July 8, 1873	.....	.....	4	36
5, 658	Burnham, N. F., York, Pa. Water-wheel..... (Extension).....	Feb. 22, 1873	.....	.....	3	156
140, 465	Burns, J., New York, N. Y. Cooler for coffee..... (Reissue).....	Nov. 18, 1873	561	190	4	547
141, 916	Burns, J., London, Canada. Tar and petroleum burner.....	July 1, 1873	103	35	4	17
142, 989	Burns, J., Anamosa, Iowa. Earth-boring machine.....	Aug. 19, 1873	474	155	4	190
144, 503	Burns, W., et al. (See Wreath, A., assignor.)	Sept. 23, 1873	595	{ 202 } 203	4	323
136, 486	Burr, B., Batavia, Ill. Wagon-body.....	Nov. 11, 1873	285	97	4	513
137, 415	Burr, D. A. (See Prall & Burr.)	Mar. 4, 1873	116	38	3	255
138, 991	Burr, D. C., and J. A. Johnson, Cromwell, Conn. Tobacco-hanger.....	Apr. 1, 1873	120	40	3	367
143, 220	Burr, F. O. J., Brewer, Me. Apparatus for moving and rolling hogsheads and heavy barrels.....	May 20, 1873	478	151	3	560
141, 203	Burr, G. A., Florence, Mass. Manufacture of whip-handle caps.....	Sept. 30, 1873	788	272	4	355
135, 075	Burr, H. J., Bloomfield, assignor to self and W. E. Simonds, Hartford, Conn. Clothes-wringer.....	July 29, 1873	808	264	4	110
140, 242	Burr, R. D., Kingsborough, N. Y. Glove.....	Jan. 21, 1873	539	175	3	79
143, 494	Burridge, T. H., and J. M. Kershaw, Saint Louis, Mo. Chromatic printing-press.....	June 24, 1873	744	235	3	700
145, 785	Burritt, H. H., assignor to W. A. Cook, Newark, N. J. Curtain-fixtures.....	Oct. 7, 1873	82	28	4	387
145, 047	Burritt, H. H., Belleville, N. J. Curtain-fixtures.....	Dec. 23, 1873	681	223	4	677
139, 452	Burroughs, J. C., Clinton, Mich. Medical compound for treating horse's hoofs, &c.....	Dec. 2, 1873	5	.....	4	586
144, 655	Burrows, E. F. (See Stillman & Burrows.)	June 3, 1873	5	2	3	609
5, 446	Burson, J., Yates City, Ill., assignor of one-half interest to H. Whitall, New York, N. Y. Charging and tamping platform for submarine blasting.....	Nov. 18, 1873	426	143	4	535
135, 771	Burstow, E., Horsham, England. Fastener for meeting-rails of sashes.....	June 17, 1873	612	193	3	681
137, 655	Burt, E. C. (See Letsinger, H. C., assignor.)	Feb. 11, 1873	354	113	3	167
141, 543	Burt, J., Sturgis, Mich., assignor by mesne assignment to A. F. Hubbell and E. R. Williams. Vehicle-seat..... (Reissue).....	Apr. 8, 1873	342	106	3	396
140, 612	Burtch, J., Hall's Corners, N. Y. Carriage-painters' stand.....	Aug. 5, 1873	117	36	4	144
26, 475	Burtis, P. T., Chicago, Ill. Gas-works hydraulic-main.....	July 8, 1873	249	84	4	40
136, 130	Burtis, P. T., assignor of one-half interest to E. T. Watkins, Chicago, Ill. Condenser for the manufacture of illuminating gas.....	Dec. 20, 1873	.....	.....	4	640
143, 495	Burtless, M., Seneca Falls, N. Y. Farm-gate.....	Dec. 4, 1873	.....	.....	4	641
143, 614	Burton, B., Brooklyn, N. Y. Breech-loading fire-arm..... (Disclaimer filed).....	Feb. 25, 1873	697	226	3	220
135, 772	Same.....	Oct. 7, 1873	83	28	4	387
6, 703	Burton, B., assignor to W. G. Burton, Brooklyn, N. Y. Metallic cartridge.....	Oct. 14, 1873	200	67, 68	4	405
135, 773	Burton, B. and W. G., said B. Burton assignor to said W. G. Burton, Brooklyn, N. Y. Breech-loading and magazine gun.....	Feb. 11, 1873	354	114	3	167
143, 875	Burton, O. F., New York, N. Y. Apparatus for extinguishing fires.....	June 17, 1873	.....	.....	3	663
145, 841	Burton, R. (See De Castro and Burton.)	Feb. 11, 1873	355	114	3	167
145, 090	Burton, W. F., Chippewa Falls, Wis. Lath-machine bed..... (Design).....	Oct. 21, 1873	455	152	4	435
136, 582	Burton, W. G. (See Burton, B., assignor.)	Dec. 23, 1873	726	238	4	680
	Same..... (See Burton, B. and W. G.)	Dec. 2, 1873	49	15	4	589
	Burton, W. H., Selma, Ala. Pipe-wrench.....	Mar. 11, 1873	223	74	3	272
	Buschmann, L., Newark, N. J., assignor to W. Quail, New York, N. Y. Composing-stick.....					
	Buschmeier, F. G., Philadelphia, Pa. Quilting-guide for sewing-machines.....					
	Buse, F., Fergus Falls, Minn. Track-clearer.....					
	Bush, A. R., Chicago, Ill. Foot-warming attachment for sewing-machine treadles.....					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
5, 649	Bush, C. G., Boston, Mass., assignor to self and J. W. Hoard. Kaleidoscope... (Reissue)	Nov. 11, 1873	362	122	4	519
143, 271	Bush, C. G., Boston, Mass., assignor to self and J. W. Hoard, Providence, R. I. Object for kaleidoscopes	Sept. 30, 1873	832	286	4	359
136, 966	Bush, C. T. Oneonta, N. Y. Iron fence	Mar. 18, 1873	551	183	3	308
138, 071	Same.....Iron-fence gate	Apr. 22, 1873	738	233	3	451
137, 341	Bush, H. J., Westfield, Mass. Whip-lash	Apr. 1, 1873	59	18	3	361
135, 885	Bush, I., assignor of one-half interest to C. McKay, Indianola, Iowa. Spring bed-bottom	Feb. 18, 1873	472	152	3	190
135, 967	Bush, I. D., Detroit, Mich. Furnace for melting brass and other metals	Feb. 18, 1873	536	177	3	195
142, 081	Bush, J. D., Elyton, Ala. Automatic-fan	Aug. 26, 1873	636	209	4	213
143, 806	Same.....Brick-machine	Oct. 21, 1873	397	{ 131 132 }	{ 4 4 }	{ 430 430 }
143, 805	Bush, J. P., Boston, Mass. Shutter-fastening	Oct. 21, 1873	397	131	4	430
138, 129	Bush, S. H., Boistfort, Wash. Ter. Scrubbing-machine	Apr. 22, 1873	781	250	3	454
145, 624	Same.....Butter-worker	Dec. 16, 1873	531	174	4	652
144, 738	Bush, S. R., Bush's Mill, Ohio. Bag-fastener	Nov. 18, 1873	491	166	4	541
5, 595	Bushfield, S. B., Baltimore, Md., assignor by mesne assignment to self, R. D. Morrison, J. H. Warner, and W. L. Stork. Treadle for sewing-machines	Oct. 14, 1873	320	106	4	414
140, 677	Bushfield, S. B., assignor to self and R. D. Morrison and J. H. Warner, Baltimore, Md. Treadle for sewing-machines	July 8, 1873	300	101	4	44
138, 852	Bushnell, A., Iona Island, N. Y. Fire-kindler	May 13, 1873	354	110	3	536
137, 889	Bushnell, H., New Haven, Conn. Compressed-air motor	Apr. 15, 1873	557	175	3	427
140, 466	Same.....Compressed-air heating-apparatus	July 1, 1873	104	35	4	17
144, 438	Bushnell, L., New Bedford, Mass. Wood-molding	Nov. 11, 1873	234	78	4	509
134, 728	Bushnell, S. S., Horicon, Wis. Cultivator	Jan. 14, 1873	226	72	3	39
135, 886	Bushnell, W., New York, N. Y. Manufacture of iron	Feb. 18, 1873	473	152	3	190
140, 467	Buss, E., Buckan, Magdeburg, Prussia, assignor to A. Budenberg, Manchester, England. Governor for engines	July 1, 1873	105	35, 36	4	17
144, 600	Bussell, E. T., Indianapolis, Ind. Car-spring	Nov. 18, 1873	376	127	4	532
5, 435	Bussey, E., assignor of three-fourths' interest to C. A. McLeod, Troy, N. Y. Reservoir cooking-stove	June 3, 1873	183	59, 60	3	624
134, 729	Butler, J. G. (See Witovee, F. J., assignor.)					
134, 729	Butler, J. W., New Britain, Conn. Gage	Jan. 14, 1873	226	72	3	39
138, 853	Butler, W. A., New York, N. Y. Sectional core	May 13, 1873	355	110	3	536
143, 326	Same.....Manufacture of water-traps	Sept. 30, 1873	880	301	4	362
143, 327	Same.....Mold for casting water-traps	Sept. 30, 1873	881	301	4	362
143, 665	Same.....Device for forming water-traps	Oct. 14, 1873	244	82	4	409
144, 057	Same.....same	Oct. 28, 1873	633	209	4	460
145, 625	Butler, W. C., Baltimore, Md. Machine for breasting the heels of boots and shoes	Dec. 16, 1873	532	174	4	652
141, 260	Butler, W. T., Chicago, Ill. Fire-proof floor and ceiling	July 29, 1873	864	282	4	114
144, 439	Butt, R., Harrisburgh, Pa. Car-coupling	Nov. 11, 1873	234	79	4	509
142, 898	Butterfield, J. C., Chicago, Ill. Eccentric	Sept. 16, 1873	512	174	4	306
144, 058	Same.....Power-hammer	Oct. 28, 1873	634	209	4	460
144, 059	Same.....same	Oct. 28, 1873	636	209	4	460
	Butterfield, W., et al. (See Coy, F. W., assignor.)					
	Butterfield, W. (See Keniston, C., assignor.)					
	Butterworth, C. C. (See Butterworth, J., assignor.)					
139, 942	Butterworth, C. F., Troy, N. Y. Muff-lining	June 17, 1873	470	147	3	670
138, 475	Butterworth, J., assignor to self and C. C. Butterworth, Philadelphia, Pa. Dryer	May 6, 1873	9	3	3	498
144, 829	Büttgenbach, F., Heerdt, Düsseldorf, Germany. Blast-furnace	Nov. 25, 1873	579	{ 197 198 }	{ 4 4 }	{ 559 559 }
142, 768	Buttkereit, C. G., Toledo, Iowa. Bell-piano	Sept. 16, 1873	407	137	4	297
137, 890	Buttles, C. A., Milwaukee, Wis. Tinner's stove for heating soldering-irons	Apr. 15, 1873	558	175	3	427
	Büttner, A. (See Freimuth & Büttner.)					
	Button, C. (See Smith, J. & J., assignors.)					
6, 665	Button, C., Philadelphia, Pa. Stocking fabric	May 27, 1873			3	585
6, 666	Same.....same	May 27, 1873			3	585
6, 667	Same.....same	May 27, 1873			3	585
6, 668	Same.....same	May 27, 1873			3	585
6, 669	Same.....same	May 27, 1873			3	585
6, 670	Same.....same	May 27, 1873			3	585
6, 671	Same.....same	May 27, 1873			3	585
6, 672	Same.....same	May 27, 1873			3	585
6, 673	Same.....Scarf	May 27, 1873			3	585
6, 674	Same.....same	May 27, 1873			3	585
6, 675	Same.....same	May 27, 1873			3	585
6, 676	Same.....same	May 27, 1873			3	586
	Button, L. (See Button, T. E., assignor.)					
137, 823	Button, T. E., assignor to self and L. Button, Waterford, N. Y. Hose and pipe coupling	Apr. 15, 1873	503	157	3	422
	Buxton, L. W., Nashua, N. H. Bedstead-fastening	Apr. 5, 1873			3	325
5, 447	Same.....same	June 17, 1873	612	193	3	681
23, 525	Same.....same	Apr. 1, 1873			3	356
136, 487	Buynitzky, S. N., Washington, D. C. Cigar-shaped pipe	Mar. 4, 1873	117	38	3	255
139, 865	Buzby, A. G., Philadelphia, Pa. Magic-lantern	June 17, 1873	402	126	3	664
144, 314	Same.....same	Nov. 4, 1873	116	39	4	488
	Buzzell, J. G. & Co. (See Dunham, G. B., assignor.)					
143, 615	Byam, A. C., Hopkinton, Iowa. Uterine supporter	Oct. 14, 1873	202	68	4	406
145, 842	Byam, E. C., Fort Dodge, Iowa. Window-blind slat operator	Dec. 23, 1873	727	239	4	680
136, 131	Bye, W. C., assignor to self and J. B. Blazer, Collette, Ind. Sulky-harrow	Feb. 25, 1873	698	226	3	220
	Byerly, J. (See Fitzhugh, B. G., assignor.)					
140, 884	Byerly, J., Frederick, Md. Apparatus for loading carts	July 15, 1873	481	162	4	67
135, 319	Byerley, N. H., Philadelphia, Pa. Shutter-fastener	Jan. 28, 1873	769	248	3	109
144, 656	Byrne, R., assignor to self and J. J. Marrin, New York, N. Y. Paint-mill	Nov. 18, 1873	426	143	4	536
140, 243	Byrne, W. F., Vicksburgh, Miss. Refrigerator for restaurants, &c.	June 24, 1873	745	235	3	700
138, 610	Byrnes, J., Chicago, Ill. Wardrobe-bedstead	May 6, 1873	122	40	3	508
144, 739	Cabanes, H., Bordeaux, France. Bolting-machine	Nov. 18, 1873	491	167	4	541
	Cable, A. D. (See Ford, J. C., assignor.)					
	Cable, G. W. (See Shepard, H. W., assignor.)					
137, 176	Cable, W., Boston, Mass. Thill-coupling	Mar. 25, 1873	749	248	3	335
137, 416	Cadwallader, C. N., assignor to L. D. Cadwallader and T. Kelley, Philadelphia, Pa. Dry-goods rack	Apr. 1, 1873	121	40	3	367
	Cadwallader, L. D., et al. (See Cadwallader, C. N., assignor.)					
134, 975	Cadwell, M., Lansing, Mich. Tug-strap	Jan. 21, 1873	450	144	3	72
138, 992	Cady, F. P., assignor of one-half interest to S. M. Cady, Cleveland, Ohio. Balanced valve	May 20, 1873	479	152	3	560
137, 760	Cady, J. N., South Hannibal, N. Y. Tobacco-plant cutter	Apr. 15, 1873	451	140	3	418

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 002	Cady, S. M. (See Cady, F. P., assignor.)					
138, 002	Cady, W. R., Lowell, assignor to J. W. Tufts, Medford, Mass. Beer-attachment for soda-water apparatus	Apr. 22, 1873	671	212	3	445
144, 504	Caffall, R. M., Alton, England. Gas-seal, &c	Nov. 11, 1873	285	97	4	513
	Cahill, J. (See Blakeley & Cahill.)					
137, 051	Cahoon, C. W. (See Chase, L., assignor.)					
	Caine, D., Battle Creek, Mich. Seeding-machine	Mar. 25, 1873	637	210	3	326
	Cairns, W. (See Rayney & Cairns.)					
145, 786	Calais, W. J. (See Anderson, J., assignor.)					
	Caldwell, D. A., Jacksonville, Ill. Grinding-mill	Dec. 23, 1873	682	223	4	677
	Caldwell, D. B. (See McGowan & Caldwell.)					
138, 476	Caldwell, G. S., Auburn, New York. Machine for unloading flat cars	May 6, 1873	10	3	3	498
139, 113	Caldwell, J. K., Philadelphia, Pa. Machine for re-pressing bricks	May 20, 1873	588	184	3	568
141, 852	Caldwell, W. G., assignor to Three Rivers Manufacturing Company, Three Rivers, Mich. Machine for edging lumber	Aug. 19, 1873	410	134	4	186
138, 733	Calkins, A. H., Chesterton, Ind. Washing-machine	May 13, 1873	250	78	3	527
138, 734	Same. same	May 13, 1873	251	78	3	528
136, 132	Calkins, J. B., Pacific, Mo. Water-tank for railway stock-cars	Feb. 25, 1873	699	226	3	220
142, 677	Call, J., Richmond, Me. Center-board for vessels	Sept. 9, 1873	319	106	4	280
139, 943	Call, W., jr., Haverstraw, N. Y. Seed-planter	June 17, 1873	471	148	3	670
135, 625	Callahan, C., assignor to E. E. Sibley, Chelsea, Mass. Weft-thread knitting-machine	Feb. 11, 1873	228	72	3	158
140, 809	Callahan, C., assignor to self and E. E. Sibley, Chelsea, Mass. Knitting-machine	July 15, 1873	416	{ 141 142 }	{ 4 4 }	61
138, 611	Callanan, T., Brooklyn, N. Y. Corner-piece for picture and other frames	May 6, 1873	123	41	3	508
	Caller, J. M., trustee. (See Enos, J. A., assignor.)					
137, 530	Callin, G. O. (See Beardsley, C. T., assignor.)					
145, 048	Calvin, D. M., East Fallowfield, Pa. Bee-hive	Apr. 8, 1873	238	73	3	388
138, 316	Same. same	Dec. 2, 1873	5	2	4	586
142, 435	Camacho, J. S., Havana, Cuba. Electro-magnetic induction-coil	Apr. 29, 1873	981	308	3	478
141, 991	Came, J. E., Boston, Mass. Billiard-table cushion	Sept. 2, 1873	98	32	4	250
	Camerer, D. C., Martinsburgh, Pa. Car-coupling	Aug. 19, 1873	532	176	4	195
135, 774	Cameron, E. G. (See Crosby & Cameron.)					
	Cameron, E. G., assignor of one-half interest to L. M. Crosby, Ashtabula, Ohio. Bed-bottoms	Feb. 11, 1873	356	114	3	167
143, 058	Camneyer, J. E., Brooklyn, New York. Cooler for water	Sept. 23, 1873	657	225	4	328
	Camozzi, J. B. C., et al. (See Kayser, L., assignor.)					
143, 059	Camp, C., Mott Haven, N. Y. Refrigerator	Sept. 23, 1873	657	225	4	328
134, 784	Camp, H., Rouseville, Pa. Steam-boiler	Jan. 14, 1873	272	89	3	42
135, 076	Camp, H., Covington, Ga. Hoe	Jan. 21, 1873	539	175	3	79
	Camp, H. B. (See Vaughn, Camp & Merrill.)					
134, 730	Camp, H. C., Saint Paul, Minn. Means for propelling vessels	Jan. 14, 1873	227	73	3	39
135, 320	Camp, O. S., Grand Rapids, Mich. Vent	Jan. 28, 1873	769	249	3	110
	Campbell & Clute. (See Paul, A., assignor.)					
143, 060	Campbell, A. M., Kline's Grove, Pa. Washing-machine	Sept. 23, 1873	658	225	4	328
141, 544	Campbell, C., New York, assignor to self and J. K. Davidson, New York, N. Y. Paint-compound	Aug. 5, 1873	118	.....	4	145
141, 204	Campbell, F. M., Saint Louis, Mo. Metallic window-sash	July 29, 1873	809	265	4	110
135, 204	Campbell, G. G., Oswego, N. Y. Articles of food	Jan. 28, 1873	667	.....	3	101
139, 453	Campbell, H. B., Racine, Wis. Ice-cream freezer	June 3, 1873	6	2	3	609
	Campbell, J., et al. (See Johnson, J. J., assignor.) (Reissue.)					
	Campbell, J. K. (See Nolan, P. W., assignor.)					
137, 417	Campbell, J. H., Willimantic, Conn. Guide for silk-winders	Apr. 1, 1873	122	40	3	367
	Campbell, J. M., et al. (See Salyer, W. H., assignor.)					
144, 888	Campbell, J. O., Alpena, Mich. Fishing-stake	Nov. 25, 1873	630	214	4	563
141, 758	Campbell, J. S., Bridgeport, Conn. Dash-board	Aug. 12, 1873	317	104	4	169
	Campbell, M. V. (See Shackford & Campbell.)					
136, 583	Campbell, O. C., Omaha, Nebr. Construction of houses	Mar. 11, 1873	223	74, 75	3	272
137, 287	Same. Spring-bed	Apr. 1, 1873	7	3	3	357
6, 460	Campbell, Robert R., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	Mar. 4, 1873	.....	.....	3	245
6, 461	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 462	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 463	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 464	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 465	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 466	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 467	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 468	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 469	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 470	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 471	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 472	Same. same (Design)	Mar. 4, 1873	.....	.....	3	245
6, 558	Same. same (Design)	Apr. 8, 1873	.....	.....	3	386
6, 559	Same. same (Design)	Apr. 8, 1873	.....	.....	3	386
6, 560	Same. same (Design)	Apr. 8, 1873	.....	.....	3	386
6, 747	Same. same (Design)	July 8, 1873	.....	.....	4	36
6, 748	Same. same (Design)	July 8, 1873	.....	.....	4	36
6, 749	Same. same (Design)	July 8, 1873	.....	.....	4	36
6, 750	Same. same (Design)	July 8, 1873	.....	.....	4	36
6, 751	Same. same (Design)	July 8, 1873	.....	.....	4	36
6, 752	Same. same (Design)	July 8, 1873	.....	.....	4	36
6, 900	Same. same (Design)	Oct. 7, 1873	.....	.....	4	379
6, 901	Same. same (Design)	Oct. 7, 1873	.....	.....	4	379
6, 902	Same. same (Design)	Oct. 7, 1873	.....	.....	4	379
6, 903	Same. same (Design)	Oct. 7, 1873	.....	.....	4	379
6, 904	Same. same (Design)	Oct. 7, 1873	.....	.....	4	379
6, 905	Same. same (Design)	Oct. 7, 1873	.....	.....	4	379
6, 906	Same. same (Design)	Oct. 7, 1873	.....	.....	4	380
6, 907	Same. same (Design)	Oct. 7, 1873	.....	.....	4	380
6, 908	Same. same (Design)	Oct. 7, 1873	.....	.....	4	380
	Campbell, W. (See Stewart & Campbell.)					
134, 639	Campbell, W., Camden N. J. Medical compound for cure of fever and ague	Jan. 7, 1873	131	.....	3	17
134, 976	Campbell, W. A., Manistee, Mich. Circular-saw mill	Jan. 21, 1873	451	144	3	72
144, 505	Campbell, W. B., Selma, Ala. Automatic fan	Nov. 11, 1873	286	97	4	513
	Campbell, W. H. W. (See Smith, G. A., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 584	Campbell, W. O., Montgomery Centre, Vt. Milk-cooler.....	Mar. 11, 1873	224	75	3	272
	Campfield, M. E. (See Gould & Campfield.)					
139, 114	Campion, W., Nottingham, and W. Campion, Sneaton, England. Knitting-machine.....	May 20, 1873	589	{ 185 186 }	{ 3 }	569
	Canady, L. (See Steiner, J. H., assignor.)					
	Candee, F. C. (See Dopp, W. H., assignor.)					
	Candee, L. & Co. (See Watkinson, G., assignor.)					
	Same.....same.....(Design.)					
137, 531	Caner, H. N., Freeport, Ill. Uterine supporter	Apr. 8, 1873	238	73	3	388
134, 640	Canfield, F. P., Boston, Mass. Brake for elevators	Jan. 7, 1873	131	42	3	17
	Canfield, J. H. (See Hyatt & Canfield.)					
136, 133	Canis, A., and F. Higgins, Manchester, N. H. Loom.....	Feb. 25, 1873	699	{ 226 227 }	{ 3 }	220
136, 699	Same.....Lubrication of clutch-pulleys.....	Mar. 11, 1873	317	105	3	280
140, 008	Cannata, D., Jersey City, N. J. Button-fastening	June 17, 1873	519	165	3	674
136, 700	Canning, G. B., Brooklyn, N. Y. Apparatus for comminuting various substances.....	Mar. 11, 1873	317	105	3	280
	Cannington, E. (See Pocheron, A., assignor.)					
139, 293	Cannon, M., Salt Lake City, Utah. Musical instrument.....	May 27, 1873	771	244	3	591
	Canoll, J. W. H. (See Bayles, Canoll & Miner.)					
138, 854	Cantrell, R. B., Tenafly, assignor to W. D. Russell, Newark, N. J. Self-loading cart	May 13, 1873	356	110	3	537
5, 502	Capewell, G. J., Cheshire, Conn. Nail-extractor	July 29, 1873	1, 010	328	4	125
143, 496	Capewell, G. J., Cheshire, Conn., assignor to E. Curtis, Watertown, D. F. Maltby, and L. J. Atwood, Waterbury, Conn. Nail-extractor	Oct. 7, 1872	83	28	4	387
144, 953	Capewell, G. J., Cheshire, Conn. Tack-hammer	Nov. 25, 1873	680	230	4	568
138, 072	Caple, C. S., assignor to self and W. Gates, Frankfort, N. Y. Work-stand.....	Apr. 22, 1873	738	234	3	451
141, 424	Capron, E. P. H., Hudson, N. Y. Clothes-wringer roller.....	Aug. 5, 1873	13	3	4	136
141, 759	Capron, E. P. H., assignor to the Capron Water-Wheel Co., Hudson, N. Y. Turbine water-wheel.....	Aug. 12, 1873	318	104	4	169
	Capron Water-Wheel Co. (See Capron, E. P. H., assignor.)					
	Carberry, J. J. (See Wood, J. S., assignor.)					
140, 009	Carbonel, M., assignor of one-half interest to J. B. Perez, Havana, Cuba. Apparatus for burning hydrocarbon	June 17, 1873	519	165	3	674
	Card, J. E. (See Nott, A. B., assignor.)					
141, 760	Card, S. W., assignor to self and J. Birkenhead, Mansfield, Mass. Machine for milling twist-drills.....	Aug. 12, 1873	319	104	4	169
	Cardell, C. E. (See Mahan, S. W., assignor.)					
	Carder, M. F. (See Henika & Carder.)					
142, 990	Carey, A. C., Malden, assignor to self and D. Peabody, Lynn, Mass. Machine for burnishing shanks of boots and shoes.....	Sept. 23, 1873	597	203	4	323
146, 043	Carey, A. C., Malden, assignor of two-thirds interest to G. F. Breed and D. Peabody, Lynn, Mass. Machinery for lasting boots and shoes	Dec. 30, 1873	924	300	4	707
5, 668	Carey, D. C., Chicago, Ill., assignor to W. G. Wilson, Cleveland, Ohio. Ruffling-attachment for sewing-machines.....(Reissue).....	Apr. 22, 1873	879	278	3	462
	Carey, H. G. (See Brown & Carey.)					
139, 766	Carey, J. D., Monaca, Ill. End-gate for wagons.....	June 10, 1873	310	96	3	649
140, 244	Carey, J. W., Baltimore, Md. Piston-packing	June 24, 1873	746	235	3	701
137, 593	Carey, W. W., assignor to self and G. W. Harris, Lowell, Mass. Hanger for shafting.....	Apr. 8, 1873	290	90	3	392
134, 850	Carlan, B. A., New York, N. Y. Tip-chair	Jan. 14, 1873	330	105	3	46
139, 866	Carleton, M. G., Indianola, Iowa. Thrashing-machine.....	June 17, 1873	403	126	3	664
141, 545	Carlin, A. B., Camden, N. J. Machine for boring blind-stiles	Aug. 5, 1873	118	37	4	145
139, 767	Carlin, J. F., Alexandria, Va. Bolt.....	June 10, 1873	311	96	3	649
143, 666	Carlisle, G., Attleborough, Mass. Rotary brush.....	Oct. 14, 1873	244	82	4	409
134, 590	Carlisle, J. M., Sumter, S. C. Corn-husker	Jan. 7, 1873	86	27	3	14
138, 477	Carll, J. F., Pleasantville, Pa. Pump	May 6, 1873	11	4	3	498
143, 876	Carlock, W. B., Worsham, Va., assignor to self and J. Graham, New York, N. Y. Grain-bag.....	Oct. 21, 1873	456	152	4	435
138, 003	Carlton, H. A., Chelsea, Mass. Check-hook for harness	Apr. 22, 1873	672	213	3	445
6, 561	Carlton, R., Liversedge, England, assignor to W. & J. Sloane, New York, N. Y. Carpet. (Design).....	Apr. 8, 1873			3	386
135, 626	Carmichel, A., assignor to J. Dewes, Westerly, R. I. Spool	Feb. 11, 1873	230	72	3	158
	Carnell, D. R., et al. (See Bingham, J., assignor.)					
	Carnell, F. L., et al. (See Bingham, J., assignor.)					
140, 403	Carnes, A. C., Smithville, Tenn. Harrow	July 1, 1873	55	19	4	12
5, 275	Caro, S., Washington, D. C. Bedstead.....(Reissue).....	Feb. 11, 1873	447	146	3	174
142, 611	Carothers, J. H., Lewisburgh, Pa. Pitman.....	Sept. 9, 1873	264	87	4	275
5, 659	Carothers, T. B., Oil City, Pa. Device for steaming oil-wells	Nov. 18, 1873	562	191	4	547
139, 656	Same.....same.....	June 10, 1873	199	65	3	641
143, 061	Carpenter, C., jr., Seekonk, Mass., assignor of one-half interest to J. B. Madell, Providence, R. I. Device for generating and burning hydrocarbon vapor	Sept. 23, 1873	659	226	4	328
145, 843	Carpenter, C., jr., Seekonk, Mass. Manufacture of iron and steel.....	Dec. 23, 1873	728	239	4	680
141, 112	Carpenter, C. C., New York, N. Y. Tape for hoop-skirts	July 22, 1873	708	237	4	94
	Carpenter, C. C., & Co. (See Lockwood & Carter, assignors.)					
140, 010	Carpenter, D. H., Hartford, Conn. Bridle-bit.....	June 17, 1873	520	165	3	674
140, 114	Carpenter, G. J., Adrian, Mich. Corn-planter.....	June 24, 1873	637	{ 200 201 }	{ 3 }	692
135, 077	Carpenter, J. A., Waverly, N. Y. Medical compound for cure of catarrh	Jan. 21, 1873	540		3	79
141, 917	Carpenter, L. D., Buffalo Grove, Iowa. Grain-sieve	Aug. 19, 1873	474	156	4	190
137, 824	Carpenter, M. P., New York, N. Y. Button.....	Apr. 15, 1873	503	157	3	422
144, 189	Carpenter, S. D., Madison, Wis. Harvester	Nov. 4, 1873	14	4	4	479
	Carpenter, T. B. (See Beckwith, S. V., assignor.)					
135, 078	Carpenter, W., Lawrence, Kans. Tuck-creaser.....	Jan. 21, 1873	540	175	3	79
141, 918	Carpenter, W. B., West Topsham, Vt. Crib.....	Aug. 19, 1873	475	156	4	191
	Carr, A. (See Wilson, J. P., assignor.)					
143, 807	Carr, A., Paterson, N. J. Valve for steam-engines	Oct. 21, 1873	398	132	4	430
	Carr, C. W., et al. (See Hume, G. H., assignor.)					
135, 263	Carr, C. W., Paola, Kans. Mechanical movements	Jan. 28, 1873	724	231	3	106
	Carr, G. W. (See Kitson & Benner, assignors.)					
	Same.....(See Kitson, G. L., assignor.)					
	Same.....(See Murphy, J., assignor.)					
143, 667	Same.....Philadelphia, Pa. Corn-husker	Oct. 14, 1873	245	82	4	409
	Carr, M. W., et al. (See Shaw, A. B., assignor.)					
144, 830	Carr, T., Bristol, Great Britain. Machine for the manufacture of flour.....	Nov. 25, 1873	580	198	4	569
138, 612	Carr, W., Yellow Springs, Ohio. Straw-stacking attachment for thrashing-machine.....	May 6, 1873	124	41	3	508
141, 992	Carr, W., assignor to K. Brown, Logansport, Ind. Apparatus for shrinking metal bands.....	Aug. 19, 1873	533	176	4	196
5, 287	Carré, F. P. E., St. Pierre Les Nemours, assignor of part interest to J. B. J. Mignon and H. S. Rouart, Paris, France. Ice machine.....(Reissue).....	Feb. 18, 1873	682	220	3	206
5, 288	Same.....Manufacture of ice.....(Reissue).....	Feb. 18, 1873	683	230	3	206

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134, 851	Carrington, E., West Meriden, Conn. Process for cutting and shaping pearl-shell.....	Jan. 14, 1873	330	105	3	47
	Carrington, W. B. (See Chamberlain, O. M., assignor.)					
144, 506	Carroll, F., New Orleans, La. Furnace for the manufacture of gas, and for other purposes.	Nov. 11, 1873	287	97	4	513
139, 768	Carroll, J. A. H., Baltimore, Md. Stop-mechanism for twisting and doubling machines.	June 10, 1873	312	96	3	649
139, 115	Carroll, T. B., Indianapolis, Ind. Fruit-jar.....	May 20, 1873	593	186	3	569
141, 761	Carroll, T. H., Erie, Pa. Sawing-machine.....	Aug. 12, 1873	320	{ 104 } 105	{ 4 } 4	169
144, 060	Carroll, T. M., Independence, Iowa. Water-heating apparatus	Oct. 28, 1873	637	209	4	460
	Carroll, W. T. (See Spaulding & Carroll.)					
144, 601	Carroll, W. T., assignor to S. E. Cook, Woonsocket, R. I. Spindle for spinning-machines..	Nov. 18, 1873	377	127	4	532
139, 367	Carrothers, J. and W., Newton, Iowa. Corn-harvester.....	May 27, 1873	825	264	3	595
	Carrothers, W. (See Carrothers, J. and W.)					
137, 825	Carroth, M. M., Helena, Ark. Cotton-stalk knocker.....	Apr. 15, 1873	504	157	3	422
144, 440	Carson, J., Buffalo, N. Y. Carriage-door	Nov. 11, 1873	236	79	4	509
137, 127	Carson, T., Brooklyn, assignor to self and T. F. Attix, New York, N. Y. Marbleized composition stone.....	Mar. 25, 1873	706	.....	3	331
	Carter, A. (See Lockwood & Carter.)					
142, 436	Carter, G. A., Princeton, Ill. Windmill	Sept. 2, 1873	99	33	4	250
	Carter, G. B. (See Marrs, D., assignor.)					
144, 889	Carter, H. C., New York, N. Y. Hasp for butter-tubs, &c.....	Nov. 25, 1873	630	214	4	563
135, 403	Carter, H. M., La Fayette, Ind. Corn-harvester	Feb. 4, 1873	7	3	1	128
	Carter, H. W. (See Blanchard, J., assignor.)					
136, 488	Carter, J., and A. C. Keith, assignors of one-half interest to J. L. Baldwin and L. Dederick, Jersey City, N. J. Tanning	Mar. 4, 1873	118	.....	3	255
6, 704	Carter, J. V. B., assignor to Detroit Stove Works, Detroit, Mich. Heating stove. (Design)	June 17, 1873	.....	.....	3	663
145, 091	Carter, L., Huntsville, Ala. Bale-tie.....	Dec. 2, 1873	50	15	4	589
140, 011	Carter, R., New York, N. Y. Fire-alarm telegraph.....	June 17, 1873	522	166	3	674
138, 855	Carter, S. C., Richmond, Ind. Electro-magnetic motor.....	May 13, 1873	358	111	3	537
143, 877	Carter, T. H., Bremen, Ky. Machine for shaving shingles.....	Oct. 21, 1873	457	153	4	435
140, 468	Carter, T. W., New Orleans, La. Chain propeller for vessels	July 1, 1873	106	36	4	17
143, 616	Carter, W. R., Brooklyn, N. Y. Copy-holder.....	Oct. 14, 1873	203	68	4	406
145, 554	Carter, Z., Line Creek, S. C. Cotton-seed planter	Dec. 16, 1873	475	155	4	648
143, 878	Carterson, J. H., Philadelphia, Pa. Card mount.....	Oct. 21, 1873	457	153	4	435
144, 441	Cartwright, A. D., Oakland, Cal. Office and counting-house stool.....	Nov. 11, 1873	236	79	4	509
144, 255	Cartwright, E., De Witt, Neb. Plow.....	Nov. 4, 1873	74	24	4	484
135, 464	Cartwright, H., Owatonna, Minn. Harrow	Feb. 4, 1873	67	21	3	133
140, 613	Carver, H. P., Binghamton, N. Y. Glove-fastening.....	July 8, 1873	249	84	4	40
141, 113	Carver, J., Lincolnville, assignor of one-half interest to J. P. Cilley, Rockland, Me. Port-stopper fastening	July 22, 1873	709	237	4	94
142, 437	Caryl, A. H., Groton, Mass. Machine for making horseshoe-nails	Sept. 2, 1873	100	33	4	250
142, 678	Caryl, A. H., Forge Village, Mass. Die for punching horseshoe nails from plates	Sept. 9, 1873	320	106	4	280
	Case, A. (See Terry, Case & Larkin.)					
137, 177	Case, H. H., Berea, Ohio. Washing-machine	Mar. 25, 1873	750	248	3	335
135, 627	Case, I., Des Moines, Iowa. Weather-strip.....	Feb. 11, 1873	231	73	3	158
145, 396	Case, J., Springfield, Ohio. Corn-planter	Dec. 9, 1873	320	108	4	623
134, 731	Case, J. T., Terryville, Conn., assignor to National Water-Wheel Company, Bristol, Conn. Water-wheel	Jan. 14, 1873	228	73	3	39
139, 541	Case, W., Troy, Ill. Coal-mining machine.....	June 3, 1873	81	28	3	615
	Case, W. B. (See Daykin & Case.)					
	Case, W. H. (See Marcell, M. R., assignor.)					
	Caselli, A. (See Ertola & Caselli.)					
138, 613	Casilear, G. W., Washington, D. C. Method of engraving bank-note plates.....	May 6, 1873	125	41	3	508
138, 614	Same	May 6, 1873	126	42	3	508
140, 573	Cass, C. N., Winchester, Ill. Barrel-stand and keg-holder	July 8, 1873	213	71	4	37
143, 808	Cass, F., New Orleans, La. Ferry-boat for trains of cars	Oct. 21, 1873	399	132	4	431
145, 334	Cass, J. F., L'Original, Canada. Milk-can	Dec. 9, 1873	270	91	4	619
140, 614	Cassiano, I. Z., San Antonio, Tex. Extension hat-brim.....	July 8, 1873	250	84	4	40
140, 615	Same.....	July 8, 1873	251	85	4	40
145, 092	Same..... Adjustable-hat.....	Dec. 2, 1873	50	16	4	589
137, 423	Castello, T. E., Brooklyn, N. Y. Painters' pot	Apr. 1, 1873	128	42	3	367
143, 272	Castle, B. S., Johnstown, Ohio. Saw-set	Sept. 30, 1873	833	286	4	359
144, 190	Castle, H. A., Ilion, N. Y. Breech-loading fire-arm	Nov. 4, 1873	16	5	4	479
141, 425	Caswell, E., assignor of one-half interest to A. H. Tower, Lyons, N. Y. Machine for boring hubs	Aug. 5, 1873	14	3	4	136
141, 993	Caswell, F., Moline, Ill. Hemmer for sewing-machines.....	Aug. 19, 1873	534	176	4	196
144, 061	Cate, E. G., Wheeling, West Va. Method of making footed glassbowls.....	Oct. 28, 1873	638	210	4	460
	Caten, J. D. (See Henning, R., assignor.)					
135, 404	Cathcart, J. L., Washington, D. C. Steering-propeller.....	Feb. 4, 1873	8	3	3	128
5, 360	Cathcart, R. S., assignor by mesne assignment to the Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer..... (Reissue)	Apr. 22, 1873	866	274	3	461
134, 641	Cathcart, R. S., assignor to Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer	Jan. 7, 1873	132	42	3	17
137, 418	Cathcart, R. S., assignor of one-half interest to the Straub Mill Company, Cincinnati, Ohio. Mill-stone bush and spindle.....	Apr. 1, 1873	123	40	3	367
143, 879	Cathcart, R. S., Cincinnati, Ohio. Shaft-coupling	Oct. 21, 1873	458	{ 153 } 154	{ 4 } 4	436
139, 867	Caton, C., Coshocton, Ohio. Miter-box	June 17, 1873	404	126	3	664
	Caton, J. D. (See Henning, R., assignor.)					
146, 044	Cattanach, D. D., Providence, R. I. Treating oils for paints, &c	Dec. 30, 1873	928	.....	4	707
134, 785	Catudal, F., Webster, Mass. Pump	Jan. 14, 1873	272	89	3	42
	Caughey, S. S. (See Roy, D., assignor.)					
134, 732	Cauthorn, I. N., Carthage, Ill. Cultivator	Jan. 14, 1873	228	73	3	39
	Cauvet, L. A. (See White, J. E., assignor)					
137, 288	Cavalli, A., assignor of half interest to V. Noly, San Francisco, Cal. Machine for inserting screw-pegs in boots and shoes.....	Apr. 1, 1873	8	3	3	358
144, 442	Caverly, A. W., New York, N. Y. Tilting-stand for carboys.....	Nov. 11, 1873	237	79	4	509
	Cavert, W. (See Orton & Cavert.)					
144, 740	Cavett, R. S., Bedias, Tex. Cultivator.....	Nov. 18, 1873	492	167	4	541
	Cawthorn, O. F. (See Toulmin, M., assignor.)					
140, 885	Caylor, J., Fairview, assignor of one-half interest to C. E. Jones, Redkey, Ind. Cultivator	July 15, 1873	482	163	4	67
141, 114	Cazier, R. H., Philadelphia, Pa. Culinary apparatus.....	July 22, 1873	710	237	4	94
141, 994	Chace, J. K., Brooklyn, N. Y., assignor to H. J. Johnson, New York, N. Y. Preserve-can	Aug. 19, 1873	534	177	4	196
	Chadborn, G. L. (See Coldwell & Chadborn.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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141, 995	Chadwick, E., Mortlake, England. Construction of roads	Aug. 19, 1873	535	177	4	196
143, 497	Chadwick, W., and S. Lownds, Brooklyn, N. Y. Cop-winding machine	Oct. 7, 1873	84	29	4	387
135, 079	Chaffee, C. S., assignor to R. N. Bassett, Birmingham, Conn. Corset-steels	Jan. 21, 1873	541	176	3	79
138, 856	Chaffee, J. C., Titusville, Pa. Paddle-wheel	May 13, 1873	359	111	3	537
140, 012	Chaffee, J. P., Washington, D. C. Braider for sewing-machines	June 17, 1873	523	166	3	674
143, 498	Chalender, G. F., Burlington, Iowa. Truss for coaches and cars	Oct. 7, 1873	85	29	4	387
	Chalk, B. R. (See Baughman & Chalk.)					
138, 735	Challinor, D., Pittsburgh, Pa. Lid for jelly-glasses	May 13, 1873	251	78	3	528
146, 045	Chambeaux, P. A., Paris, France. Apparatus or cock with safety-plug	Dec. 30, 1873	930	300	4	707
	Chamberlain, G. J., executor. (See Lewis, D. D.)					
136, 362	Chamberlain, O. M., assignor of one-half interest to W. B. Carrington, New York, N. Y. Box plaiting-machine	Mar. 4, 1873	7	3	3	246
137, 342	Same.....Plaiting-attachment for sewing-machines	Apr. 1, 1873	60	18, 19	3	361
137, 343	Same.....Box plaiting-attachment for sewing-machines	Apr. 1, 1873	61	19	3	362
137, 344	Same.....Trimming	Apr. 1, 1873	62	19	3	362
139, 657	Chamberlain, O. M., assignor to self and W. B. Carrington, New York, N. Y. Plaiter for sewing-machines	June 10, 1873	199	65	3	641
142, 769	Chamberlin, C. A., Philadelphia, Pa. Anchor	Sept. 16, 1873	409	138	4	297
	Chamberlin, E., et al. (See Morehouse, C. B., assignor.)					
5, 698	Chamberlin, E., Lansingburgh, assignor by mesne assignment to self and J. O. Merriam, Troy, N. Y. Device for clamping whip-sockets to vehicles. (Reissue)	Dec. 23, 1873	814	265	4	687
5, 699	Same.....Device for clamping whip-sockets to vehicles	Dec. 23, 1873	814	265	4	687
5, 700	Same.....same	Dec. 23, 1873	815	266	4	687
135, 405	Chamberlin, M. J., Springfield, Mass. Breech-loading fire-arm	Feb. 4, 1873	9	4	3	128
142, 144	Chamberlin, W. B., Westfield, N. J. Bake-pan	Aug. 26, 1873	691	227	4	218
140, 184	Chambers, A., Providence, R. I. Wadding and machine for its manufacture	June 24, 1873	699	220	3	696
141, 996	Chambers, B. C., Shady Plain, Pa. Sewing-machine motor	Aug. 19, 1873	536	177	4	196
	Chambers, C., jr., et al. (See Clark, C., assignor.)					
	Same.....(See Farrington, W., assignor.)					
	Same.....(See Overend, W., assignor.)					
	Same.....(See Williams, J., assignor.)					
	Chambers, C., jr., Philadelphia, Pa. Paper folding-machine	Apr. 5, 1873			3	325
	Same.....Machine for folding paper	Nov. 15, 1873			4	504
5, 533	Same.....Paper-folding machine	Aug. 12, 1873	402	131	4	175
23, 445	Same.....same	Apr. 4, 1873			3	356
141, 486	Same.....Packing-box for paper-folding machines	Aug. 5, 1873	66	21	4	140
141, 487	Same.....Machine for folding, cutting, and trimming paper	Aug. 5, 1873	67	21	4	140
141, 488	Same.....Machine for folding, pasting, and inserting paper	Aug. 5, 1873	69	22	4	140
141, 489	Chambers, C., jr., and W. Mendham, assignors to E. and C. Chambers, jr., Philadelphia, Pa. Paper-folding machine	Aug. 5, 1873	71	22, 23	4	140
141, 490	Same.....same	Aug. 5, 1873	73	23	4	141
	Chambers, E. (See Chambers & Mendham, assignors.)					
	Chambers, E., et al. (See Clark, C., assignor.)					
	Same.....(See Farrington, W., assignor.)					
	Same.....(See Overend, W., assignor.)					
	Same.....(See Williams, J., assignor.)					
141, 321	Chambers, W. J. (See Lusby, C. C., assignor.)					
	Chamness, E., Greensburgh, and J. Vaughan, Chesterfield, assignors to selves and J. Raymond, Greensburgh, Ind. Polish for stoves	July 29, 1873	918		4	119
144, 062	Champlin, A. F., Westerly, R. I. Blind-slat fastener	Oct. 28, 1873	638	210	4	460
144, 954	Chandler, A. F., Fall River, Mass. Car-coupling	Nov. 25, 1873	681	231	4	568
142, 770	Chandler, B. B., jr., Boston, Mass. Treadle-mechanism	Sept. 16, 1873	409	138	4	297
	Chandler, C. H. (See Hale & Chandler)					
	Chandler, C. R. (See Bradley, G., assignor.)					
143, 328	Chandler, J. P. and W. V. Tainter, South Carthage, Me. Wheel for vehicles	Sept. 30, 1873	882	301	4	362
139, 495	Chandler, J. W., East Corinth, Me. Machine for skiving leather	June 3, 1873	47	15	3	612
	Chandler, L. (See Sperry & Chandler.)					
	Chandler, L. H., et al. (See Teed, T., assignor)					
145, 987	Chandler, M., East Corinth, Me. Water-wheel	Dec. 30, 1873	880	285	4	703
139, 368	Chandler, R., New York, N. Y. Sewing-machine	May 27, 1873	826	264	3	596
	Chandler, T. A. (See Pennock & Chandler.)					
135, 688	Chandless, J., New York, N. Y. Beer-cooler	Feb. 11, 1873	286	90	3	162
	Chaney, P. (See Clark & Chaney.)					
	Chapin, A. P. (See Bassett, E., assignor.)					
135, 522	Chapin, H. A., Bridgeport, Conn. Machine for doubling and twisting silk	Feb. 4, 1873	115	36, 37	3	137
138, 993	Same.....Electrical stops for spinning-machinery	May 20, 1873	480	152	3	560
144, 191	Same.....Spinning and twisting machine	Nov. 4, 1873	18	5	4	480
135, 689	Chapin, M., Erie, Pa. Hub and axle for vehicles	Feb. 11, 1873	287	90	3	162
	Chapin Machine Company. (See Coe, D. S., assignor.)					
135, 775	Chaplin, W. J., Kalamazoo, Mich. Car-coupling	Feb. 11, 1873	356	{ 114 } { 115 }	3	167
	Chapman, A. (See Wright, H. W., assignor.)					
137, 289	Chapman, A. G., assignor of half interest to H. E. Niles, East Hampton, Conn. Burial-casket handle	Apr. 1, 1873	10	3	3	358
141, 322	Chapman, C. P., Afton, Iowa. Wash-boiler attachment	July 29, 1873	919	300	4	119
136, 585	Chapman, C. W., Liverpool, England. Machine for rerolling metallic bands	Mar. 11, 1873	225	75	3	272
144, 192	Chapman, E. C., Lacon, assignor of one-half interest to J. M. Horton, Chicago, Ill. Stove-pipe damper	Nov. 4, 1873	19	5	4	480
142, 206	Chapman, G. A., assignor to Woonsocket Machine Company, Woonsocket, R. I. Lubricating journal	Aug. 26, 1873	742	244	4	222
145, 093	Chapman, H. L., Marcellus, Mich. Fly-trap	Dec. 2, 1873	51	16	4	589
	Chapman, J. F., et al. (See Baranger, H., assignor.)					
142, 082	Chapman, J. L., assignor of two-thirds interest to J. C. Stockton and J. Watson, Philadelphia, Pa. Telegraph-pole	Aug. 26, 1873	637	209	4	213
135, 406	Chapman, L., assignor to the Collins Company, Collinsville, Conn. Die for making wrench-heads	Feb. 4, 1873	13	4	3	129
137, 052	Same.....Die for forming wrench-heads	Mar. 25, 1873	638	211	3	326
137, 053	Same.....same	Mar. 25, 1873	638	211	3	326
137, 054	Chapman, L., assignor to self and W. J. Wood, Collinsville, Conn. Rotary pump	Mar. 25, 1873	639	211	3	326
137, 055	Same.....same	Mar. 25, 1873	640	212	3	327
137, 056	Same.....Rotary engine or pump	Mar. 25, 1873	640	{ 212 } { 213 }	3	327
137, 057	Chapman, L., assignor of one-half interest to W. J. Wood, Collinsville, Conn. Rotary pump	Mar. 25, 1873	641	213	3	327

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137, 058	Chapman, L., assignor of one-half interest to W. J. Wood, Collinsville, Conn. Rotary-pump	Mar. 25, 1873	642	213	3	327
135, 887	Chapman, L. J., Vallejo, Cal. Bolt-cutter	Feb. 18, 1873	474	153	3	190
	Chapman, M. C. (See Chapman, M. T. and M. C.)					
136, 412	Chapman, M. T. and M. C., Aurora, Ill. Adjustable valve for bored or driven wells	Mar. 4, 1873	52	18	3	249
145, 335	Same Windmill	Dec. 9, 1873	271	91	4	619
138, 004	Chapman, N., Hopedale, Mass. Loom temple	Apr. 22, 1873	672	213	3	445
140, 013	Same	June 17, 1873	524	166	3	674
144, 507	Same	Nov. 11, 1873	288	98	4	513
144, 657	Chapman, N. D., assignor to self and H. H. Warren, Rollingsford, N. H. Loom-shuttle	Nov. 18, 1873	426	144	4	536
142, 438	Chapman, S. J., Baltimore, Md. Strainer for ship's bilge-pumps	Sept. 2, 1873	102	33	4	250
144, 383	Chapman, T. M., Old Town, Me. Saw-sharpening machine	Nov. 11, 1873	187	64	4	505
136, 586	Chappell, B. F., assignor to self and N. Smith, Hartford, Conn. Lamp-burner	Mar. 11, 1873	226	76	3	272
139, 542	Chaput, L. G., New York, N. Y. Printer's chase	June 3, 1873	83	29	3	616
141, 628	Chaput, L. G., assignor to R. Howe & Co., New York, N. Y. Stopper for bottles containing inflammable liquors, &c.	Aug. 12, 1873	208	66	4	160
143, 880	Chaput, L. G., New York, N. Y. Bronzing-pad	Oct. 21, 1873	459	154	4	436
144, 741	Chaput, L. G., W. and J. Braidwood, New York, N. Y. Bronzing-machine	Nov. 18, 1873	493	167	4	541
145, 988	Chard, S., Mianus, Conn. Sash-holder	Dec. 30, 1873	881	285	4	703
	Charles, B. (See Urso & Charles.)					
	Charles, I. et al. (See Jackson, R. A., assignor.)					
143, 181	Charters, D. M., Xenia, Ohio. Alarm-clock	Oct. 21, 1873	460	154	4	436
134, 852	Chase, C. M., Boston, assignor to E. L. Baker, New Bedford, Mass. Nail-distributing-machine	Jan. 14, 1873	331	106	3	47
141, 997	Chase, C. M., assignor to F. Curtis, Boston, Mass. Machinery for finishing the sole-edges of boots and shoes	Aug. 19, 1873	537	{ 177 } { 173 }	{ 4 }	{ 196 }
	Chase, E. D. (See Chase, H. L., P. F., and E. D.)					
144, 831	Chase, F., Boston, assignor to self and G. S. Scammon, Malden, Mass. Valve actuating mechanism for engines	Nov. 25, 1873	581	{ 198 } { 199 }	{ 4 }	{ 559 }
138, 994	Chase, H. L., P. F., and E. D., Peoria, Ill. Elevating, conveying, storing, and shipping grain	May 20, 1873	481	152	3	560
	Chase, I. (See Jonson, J., assignor.)					
143, 221	Chase, J., Rochester, N. Y. Wood-turning lathe	Sept. 30, 1873	788	272	4	355
141, 762	Chase, L., assignor of one-half interest to C. W. Cahoon, Portland, Me. Air compressor or blower	Aug. 12, 1873	321	105	4	169
143, 329	Chase, L., assignor to self and C. W. Cahoon, Portland, Me. Air compressor or blower	Sept. 30, 1873	882	{ 301 } { 302 }	{ 4 }	{ 363 }
143, 882	Chase, L., assignor of one-half interest to C. W. Cahoon, Portland, Me. Apparatus for raising water	Oct. 21, 1873	461	{ 154 } { 155 }	{ 4 }	{ 436 }
141, 115	Chase, M. W., Buffalo, N. Y. Seat-hinge	July 22, 1873	710	237	4	94
137, 594	Chase, N. E., Boston, Mass. Portable stove	Apr. 8, 1873	290	90	3	392
134, 591	Chase, O., Rutland, Ohio. Pruning-shears	Jan. 7, 1873	87	27	3	14
	Chase, P. F. (See Chase, H. L., P. F., and E. D.)					
	Chase, R. D. (See French & Chase)					
143, 273	Chase, W. D., Marion, N. J. Machine for cutting and threading pipes, &c.	Sept. 30, 1873	833	287	4	359
137, 290	Chase, W. H., Washington, D. C. Apparatus for cleaning sewers	Apr. 1, 1873	10	3	3	358
138, 736	Chatard, F. E., jr., Baltimore, Md. Heat-governor or draft-regulator	May 13, 1873	252	78	3	528
143, 499	Chatillon, J. P., New York, N. Y. Scale-pan	Oct. 7, 1873	86	29	4	387
136, 031	Chaudron, J., Brussels, Belgium. Apparatus for lowering and sinking shaft and well tubes	Feb. 18, 1873	591	194	3	200
130, 702	Cheesman, J. L., New York, N. Y. Gas-purifier tray or grating	June 10, 1873	249	79	3	645
	Cheesman, R. C. (See Ressler, B. W. S. and C. H., assignors.)					
134, 977	Chenette, C., Manchester, N. H. Sleigh-runner	Jan. 21, 1873	452	145	3	72
136, 967	Cheney, A. M., Charlotte, Mich. Machine for folding and measuring cloth	Mar. 18, 1873	552	183	3	308
	Cheney, D. (See Armstrong & Cheney.)					
136, 701	Cheney, J. W., Detroit, Mich. Sewing-machine table	Mar. 11, 1873	318	105	3	280
137, 345	Cheney, N., New York, N. Y. Fire-proof floor	Apr. 1, 1873	63	20	3	362
144, 602	Chenoweth, W. E., Baltimore County, Md. Fluid compound for embalming human bodies	Nov. 18, 1873	378	.....	4	532
145, 626	Cherrington, W. P., Boston, assignor to self, W. B. Foster, Medford, and W. A. Morrisson, Cambridge, Mass. Self-closing hatchway	Dec. 16, 1873	533	{ 174 } { 175 }	{ 4 }	{ 653 }
	Chertizza, J. (See Demartini & Chertizza.)					
	Chess, H. B. (See Hollis & Chess.)					
145, 720	Chess, H. B., Pittsburgh, Pa. Nail-separating device	Dec. 23, 1873	625	205	4	672
	Chessman, R. (See Coyne, J., assignor.)					
139, 294	Chester, C. T., Englewood, N. J. Apparatus for reproducing motion	May 27, 1873	771	245	3	591
144, 955	Chevalier, J. F., Lyons, France. Varnish or polish for wood, metals, &c.	Nov. 25, 1873	682	.....	4	568
139, 295	Chevers, T. R. L., Hoboken, N. J. Combined umbrella and cane	May 27, 1873	772	245	3	591
	Chicago Shot-Tower Company. (See Bradford, J., assignor.)					
	Chicago Waste-Cleansing Company. (See Sagar, G., assignor.)					
	Chichester, C. F. (See Chichester, L. S., assignor.)					
5, 683	Chichester, F., Milwaukee, Wis., assignor to self and L. A. Chichester, Phenicia, N. Y. Cradle	Dec. 16, 1873	609	199	4	659
135, 465	Chichester, F., Milwaukee, Wis. Sewing-machine chair	Feb. 4, 1873	68	21	3	133
138, 073	Same Adjustable sewing machine chair	Apr. 22, 1873	739	234	3	451
141, 032	Same Spring-cradle	July 22, 1873	637	214	4	88
141, 033	Same Cradle	July 22, 1873	637	214	4	88
142, 145	Same Spring rocking-chair	Aug. 26, 1873	692	227	4	218
	Chichester, L. A. (See Chichester, F., assignor.)					
5, 496	Chichester, L. A., Poughkeepsie, N. Y. Cradle	July 22, 1873	788	258	4	100
134, 513	Chichester, L. S., assignor to C. F. Chichester, Brooklyn, N. Y. Machine for preparing flour	Jan. 7, 1873	11	4	3	8
136, 302	Same Food compound	Feb. 25, 1873	842	.....	3	231
136, 303	Same	Feb. 25, 1873	843	.....	3	231
136, 304	Same	Feb. 25, 1873	843	.....	3	231
136, 305	Same Article of food from cereals	Feb. 25, 1873	844	.....	3	231
136, 306	Same Preparing corn-meal for shipment	Feb. 25, 1873	844	.....	3	231
144, 508	Same Food for infants from cereals	Nov. 11, 1873	289	.....	4	513
136, 702	Chicken, W., assignor to A. L. Wood, trustee, Boston, Mass. Clamp for button-hole sewing-machines	Mar. 11, 1873	319	105	3	280
141, 693	Chickering, A. E., and H. B. Tuttle, Albany, N. Y. Channeling-machine for boots and shoes	Aug. 12, 1873	263	85	4	164
143, 883	Chilcott, J., Brooklyn, N. Y. Valve for the waste-pipe of sinks	Oct. 21, 1873	462	155	4	436
	Child, C. C. (See Montague, C., assignor.)					
144, 742	Child, C. C., Boston, Mass. Rotary printing-press	Nov. 18, 1873	494	168	4	541
	Childs, E. D. (See Harris & Childs.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
134, 514	Childs, H. J., New York, N. Y. Coffee-pot.....	Jan. 7, 1873	12	4	3	8
134, 515	Same.....same.....	Jan. 7, 1873	12	5	3	8
136, 703	Same.....same.....	Mar. 11, 1873	320	106	3	280
	Childs, J. M. (See Jackson, and J. M. & O. J. Childs.)					
139, 543	Childs, J. W., Kansas City, Mo. School-desk.....	June 3, 1873	84	29	3	616
	Childs, O. J. (See Jackson, and J. M. & O. J. Childs.)					
140, 346	Chillingworth, J. G., London, England. Cap, or cover for bottles.....	July 1, 1873	12	4	4	9
	Chilson, G., Boston, Mass. Cooking-range.....(Extension).....	Jan. 4, 1873			2	729
139, 236	Chilson, H., Ware, Mass. Friction-mechanism for yarn-beams.....	May 27, 1873	719	226	3	587
135, 080	Chinn, R. H., Washington, D. C. Writing-pen.....	Jan. 21, 1873	542	176	3	79
138, 787	Chinnock, G. H., Brooklyn, assignor to J. H. Hapgood, New York, N. Y. Paint-brush.....	May 13, 1873	296	91	3	531
139, 868	Chinnock, G. H., Brooklyn, N. Y. Metal can for paint, &c.....	June 17, 1873	404	126	3	664
139, 869	Same.....same.....	June 17, 1873	405	127	3	664
139, 870	Same.....Paper bag.....	June 17, 1873	406	127	3	665
142, 612	Chinnock, G. H., assignor to L. Richardson, Brooklyn, N. Y. Can for holding paint, &c.....	Sept. 9, 1873	264	87	4	275
142, 613	Chinnock, G. H., assignor of one-half interest to L. Richardson, Brooklyn, N. Y. Can for oil, &c.....	Sept. 9, 1873	265	87	4	275
	Chipman, A., et al. (See Pettee, F. W., assignor.)					
145, 844	Chiple, L. M., Saint Louis, Mo. Fire-escape.....	Dec. 23, 1873	729	239	4	681
136, 413	Chisholm, H., Cleveland, Ohio. Furnace for reheating metals, &c.....	Mar. 4, 1873	52	18, 19	3	250
135, 205	Chisholm, J., and I. C. Mayer, Toronto, Canada. Truck.....	Jan. 28, 1873	67	215	3	101
	Chisholm, W. (See Bidwell & Chisholm.)					
142, 083	Choat, D. T., and H. Rich, Cedar Falls, Iowa. Flour-bolt.....	Aug. 26, 1873	638	209	4	213
139, 871	Choate, B. B., Springfield, Vt. Shoe-lacing fastening.....	June 17, 1873	407	127	3	665
136, 704	Chollar, B. E., and J. G. Johannes, Leavenworth, Kans. Lamp-chimney cleaner.....	Mar. 11, 1873	321	106	3	280
140, 014	Chomel, L. A., New York, N. Y. Oscillating berth for ships.....	June 17, 1873	525	166	3	674
134, 642	Chormann, E. G., Philadelphia, Pa. Gearing.....	Jan. 7, 1873	134	43	3	17
145, 277	Chrimes, T., Jackson, Mich. Artificial stone.....	Dec. 9, 1873	218		4	615
138, 788	Christian, J. B., Hamburg, Iowa. Means for operating earth-augers.....	May 13, 1873	297	91	3	532
137, 656	Christmas, E. B., Mansfield, Ohio. Picture-mounting machine.....	Apr. 8, 1873	343	106	3	396
6, 473	Christie, J. M., Brooklyn, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet.....(Design).....	Mar. 4, 1873			3	245
6, 474	Same.....same.....(Design).....	Mar. 4, 1873			3	245
6, 475	Same.....same.....(Design).....	Mar. 4, 1873			3	245
6, 476	Same.....same.....(Design).....	Mar. 4, 1873			3	245
6, 477	Same.....same.....(Design).....	Mar. 4, 1873			3	245
6, 478	Same.....same.....(Design).....	Mar. 4, 1873			3	245
6, 479	Same.....same.....(Design).....	Mar. 4, 1873			3	245
6, 562	Same.....same.....(Design).....	Apr. 8, 1873			3	386
6, 563	Same.....same.....(Design).....	Apr. 8, 1873			3	386
6, 564	Same.....same.....(Design).....	Apr. 8, 1873			3	386
6, 565	Same.....same.....(Design).....	Apr. 8, 1873			3	386
6, 566	Same.....same.....(Design).....	Apr. 8, 1873			3	386
6, 567	Same.....same.....(Design).....	Apr. 8, 1873			3	386
6, 568	Same.....same.....(Design).....	Apr. 8, 1873			3	386
6, 569	Same.....same.....(Design).....	Apr. 8, 1873			3	387
6, 570	Same.....same.....(Design).....	Apr. 8, 1873			3	387
6, 571	Same.....same.....(Design).....	Apr. 8, 1873			3	387
6, 753	Same.....same.....(Design).....	July 8, 1873			4	36
6, 754	Same.....same.....(Design).....	July 8, 1873			4	36
6, 755	Same.....same.....(Design).....	July 8, 1873			4	36
6, 756	Same.....same.....(Design).....	July 8, 1873			4	36
	Christoffel, J. B. (See Sexauer, L., assignor.)					
137, 826	Christoffel, J. B., Williamsburgh, N. Y. Boiler tube scraper.....	Apr. 15, 1873	504	158	3	422
138, 317	Same.....Coiled-wire brush.....	Apr. 29, 1873	982	308	3	478
136, 414	Christy, J., Cincinnati, Ohio. Means of operating steamboat-chimneys.....	Mar. 4, 1873	53	19	3	250
143, 962	Christy, J., Clyde, Ohio. Pruning-hook.....	Oct. 28, 1873	548	182	4	453
141, 763	Christy, R., Mansfield Valley, Pa. Lamp.....	Aug. 12, 1873	322	105	4	169
	Christy, T., jr. (See Liebe, Gorman & Christy.)					
137, 059	Christy, T., jr., and A. Bobrownicki, London, England. Process for treating sewage and ammoniacal waters for the production of fertilizers, &c.....	Mar. 25, 1873	642		3	327
138, 074	Chubb, J. J., assignor to self and S. C. Bollman, Decatur, Ill. Oiling millstone spindles.....	Apr. 22, 1873	740	234	3	451
145, 049	Chubbuck, A. F., Casnovia, Mich. Extension-table.....	Dec. 2, 1873	6	2	4	586
138, 789	Church, D. M., assignor to T. Merrick, Holyoke, Mass. Machine for pointing the journals of bobbins.....	May 13, 1873	297	91	3	532
139, 043	Church, J., Saint Louis, Mo. Machine for entering blind-slats.....	May 20, 1873	521	165	3	563
143, 062	Same.....Faucet-attachment.....	Sept. 23, 1873	661	226	4	328
140, 469	Church, P. M., assignor to P. S. Church, Sault de Ste. Marie, Mich. Apparatus for leaching and concentrating bark-extracts.....	July 1, 1873	107	36	4	17
	Church, P. S. (See Church, P. M., assignor.)					
144, 016	Churchill, E., Saint Thomas, Canada. Felt roofing.....	Oct. 28, 1873	600		4	457
143, 274	Churchill, H. L., and J. D. Robinson, Taunton, Mass. Eyelet-making machine.....	Sept. 30, 1873	834	287	4	359
	Churchill, J. (See Thissell, E. A., assignor.)					
141, 919	Churchill, J. H., Cross River, N. Y. Hoisting-jack.....	Aug. 19, 1873	475	156	4	191
135, 690	Churchill, J. L., Nokomis, Ill. Reversible magnet.....	Feb. 11, 1873	287	91	3	162
140, 115	Churchill, W., Saint Louis, Mo. Safety-valve.....	June 24, 1873	638	201	3	692
145, 278	Churchman, N., Pioche, Nev. Ingot-mold.....	Dec. 9, 1873	219	75	4	615
142, 614	Cilik, M., Chicago, Ill. Powder-flask.....	Sept. 9, 1873	267	87	4	275
	Ciley, J. J., et al. (See Thayer, W. H., assignor.)					
	Ciley, J. P. (See Carver, J., assignor.)					
	Cinquini, P. (See Evarts & Cinquini.)					
140, 886	Clafin, G., Miller's Corners, N. Y. Potato-screen.....	July 15, 1873	482	163	4	67
	Clapp, E. D. (See Van Patten, F., assignor.)					
134, 978	Clapp, H. W., Concord, N. H. Grating for sewer-inlets.....	Jan. 21, 1873	453	145	3	72
	Clapp, J. B. (See Goldthorp & Hield, assignors.)					
140, 470	Clapper, M. J., Holland, Mich. Wash-boiler.....	July 1, 1873	109	37	4	17
	Claridge, D. (See Abraham, G. F., assignor.)					
	Clark, A. (See Stimens & Martin, assignors.)					
137, 595	Clark, A., London, England. Corrugated metallic rolling shutter.....	Apr. 8, 1873	291	90	3	392
137, 827	Same.....Manufacture of corrugated-metal shutters.....	Apr. 15, 1873	505	158	3	422
	Clark, A. T. (See Duvall, L., assignor.)					
	Clark, B. H. (See Corpman, E., assignor.)					
136, 212	Clark, C., Unadilla Forks, N. Y. Hoisting-apparatus.....	Feb. 25, 1873	762	246	3	225
141, 491	Clark, C., New York, N. Y., assignor to C., jr., & E. Chambers, Philadelphia, Pa. Packing device for paper-folding machines.....	Aug. 5, 1873	75	23	4	141

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 887	Clark, C. B., Buffalo, N. Y. Sash-cord guide.....	July 15, 1873	483	163	4	67
141, 323	Same.....Lock-hinge.....	July 29, 1873	919	301	4	119
145, 397	Same.....Mop-head.....	Dec. 9, 1873	322	109	4	624
135, 524	Clark, C. D. (See Clark, C. P. and C. D.)					
	Clark, C. H., assignor to self, C. H. Longley, and N. A. Durham, Hartford, Conn. Auto- matic fan.....	Feb. 4, 1873	118	37	3	137
145, 627	Clark, C. M., Seward, Nebr. Plow.....	Dec. 16, 1873	534	175	4	653
138, 378	Clark, C. P. and C. D., Beaver Dam, Wis. Machine for cutting splints.....	Apr. 29, 1873	1,030	325	3	482
	Clark, C. S. (See Barker, E. W., assignor.)					
141, 998	Clark, E. A., Jackson, Tenn. Borer for sampling cotton.....	Aug. 19, 1873	540	178	4	196
145, 721	Clark, E. B., assignor of one-half interest to M. Andrae, Cohoes, N. Y. Apparatus for transferring power.....	Dec. 23, 1873	626	205	4	672
143, 963	Clark, E. H., Appleton, Wis. Earth-anger.....	Oct. 28, 1873	549	182	4	453
142, 615	Clark, E. R., Marshfield, Ill. Sewing-machine caster.....	Sept. 9, 1873	268	88	4	275
138, 228	Clark, E. Y., Brooklyn, and W. A. Lilliendahl, New York, assignors to said Clark, E. M. Lilliendahl, New York, and J. H. Beardsley, Brooklyn, N. Y. Sign f r moving vehicles.....	Apr. 29, 1873	894	282	3	472
	Clark, F. L. (See Clark, J. M., assignor.)					
	Clark, G. H. (See Crowell, A. F., assignor.)					
142, 146	Clark, G. H., Brooklyn, N. Y. Grate-bar.....	Aug. 26, 1873	692	228	4	218
	Clark, G. M. (See Clark, T. J. and G. M.)					
5, 258	Clark, G. W., Council Bluffs, Iowa. Governor for steam-engines.....(Reissue)...	Jan. 28, 1873	844	272	3	115
137, 178	Clark, H. A., Boston, Mass. Spring butt-hinge.....	Mar. 25, 1873	750	249	3	335
141, 116	Same.....Process for the manufacture of artificial leather.....	July 22, 1873	711	.....	4	94
141, 117	Same.....Artificial leather.....	July 22, 1873	711	.....	4	94
141, 118	Same.....Preparing cloth and paper and like fabrics to imitate leather.....	July 22, 1873	712	.....	4	94
142, 439	Same.....Manufacture of carpets.....	Sept. 2, 1873	102	34	4	251
143, 122	Same.....Fabric prepared to imitate leather.....	Sept. 23, 1873	705	.....	4	332
	Clark, H. E. (See Haldeman, J. S., assignor.)					
	Clark, H. M. (See Almy, G. F., assignor.)					
	Clark, J. (See Edson, J., assignor.)					
	Clark, J., jr., et al. (See Bristol, H. C., assignor.)					
136, 813	Clark, J., Pontiac, Mich. Car for carrying petroleum.....	Mar. 18, 1873	427	141	3	298
141, 629	Clark, J., Haverstraw, N. Y. Machine for punching metal.....	Aug. 12, 1873	209	66	4	160
	Clark, J. B. (See Ransom, G. B., assignor.)					
	Clark, J. H. (See Tibbetts, L., assignor.)					
140, 764	Clark, J. M., assignor to F. L. Clark, Lancaster, Pa. Lamp.....	July 15, 1873	377	{ 129 130 }	4	58
145, 150	Clark, J. M., assignor of one-half interest to T. C. Coleman, Louisville, Ky. Furnace- door.....	Dec. 2, 1873	103	34	4	593
143, 668	Clark, J. W., Pittsburgh, Pa. Rein-holder.....	Oct. 14, 1873	245	83	4	409
	Clark, L., Brooklyn, N. Y. Hem-folder.....(Extension)...	Oct. 18, 1873	.....	.....	4	400
137, 891	Clark, M. C., Manchester, N. H. Horseshoe.....	Apr. 15, 1873	559	175	3	427
135, 407	Clark, M. S., assignor to C. Harrison, New York, N. Y. Self-closing faucet.....	Feb. 4, 1873	14	4	3	129
141, 630	Same.....Self-closing cock.....	Aug. 12, 1873	210	66	4	160
143, 275	Clark, P. E., Hartford, Conn. Machine for gumming shoe-uppers.....	Sept. 30, 1873	836	288	4	359
	Clark, P. J. (See Kintz, J., assignor.)					
141, 694	Clark, R. A., Petrolia City, Pa. Drill-rod coupling.....	Aug. 12, 1873	264	85	4	164
136, 643	Clark, R. B., Lyle, Minn. Grain measurer and register.....	Mar. 11, 1873	272	91	3	276
140, 015	Clark, S. W., and W. R. Sykes, said Sykes assignor to said Clark, London, England. Sig- nal-lantern.....	June 17, 1873	526	167	3	674
137, 060	Clark, T. J. and G. M., Higganum, Conn. Plow.....	Mar. 25, 1873	645	214	3	327
140, 574	Same.....Railway-frog.....	July 8, 1873	214	71	4	37
141, 999	Same.....Hay-tedder.....	Aug. 19, 1873	541	178	4	196
	Clark, W. A., et al. (See Andrews, E., assignor.)					
5, 393	Clark, W. A., New Haven, Conn. Hollow auger.....(Reissue)...	May 6, 1873	237	74	3	517
139, 769	Same.....Ice-auger.....	June 10, 1873	312	97	3	650
141, 324	Same.....Expansive bit.....	July 29, 1873	920	301	4	119
142, 556	Same.....Axle-box for vehicles.....	Sept. 9, 1873	218	71	4	271
142, 837	Clark, W. H., and P. Chaney, jr., Oregon, assignors to selves and J. H. White, Hale, Ill. Railway-switch.....	Sept. 16, 1873	463	157	4	302
	Clark, W. J. (See Hitchcock, C., assignor.)					
138, 615	Clark, W. P., Medford, Mass. Draught-cock for soda-fountains.....	May 6, 1873	127	42	3	508
136, 307	Clark, W. R., Thellertown, Pa. Railway-rail joint.....	Feb. 25, 1873	845	273	3	231
136, 587	Clarke, A., Philadelphia, Pa. Hat and parcel holder.....	Mar. 11, 1873	227	76	3	273
	Clarke, C. J., et al. (See Culmer, J. W., assignor.)					
135, 888	Clarke, G. B., Leonardsville, N. Y. Sky-light.....	Feb. 18, 1873	475	153	3	190
134, 643	Clarke, G. E., Kenosha, Wis. Fanning-mill.....	Jan. 7, 1873	135	{ 43 44 }	3	17
5, 497	Clarke, H., Baltimore, Md., assignor by mesne assignment to The Clarke Lock Company, Louisville, Ky. Combination lock.....(Reissue)...	July 22, 1873	789	258	4	100
135, 523	Clarke, H., Baltimore, Md. Combination lock.....	Feb. 4, 1873	117	37	3	137
6, 572	Clarke, J. B., Brooklyn, N. Y. Trimming.....(Design)...	Apr. 8, 1873	.....	.....	3	387
	Clarke Lock Company. (See Clarke, H., assignor.).....(Reissue)...					
136, 032	Clarke, N., Boston, Mass. Hat-rack.....	Feb. 18, 1873	592	195	3	200
	Clarke, Reeves & Co. (See Bonzano, A., assignor.)					
	Clarke, Reeves & Co. (See Clarke, Bonzano & Griffen, assignors.)					
	Clarke, T. A. W. (See Donisthorpe & Clarke.)					
135, 776	Clarke, T. C., Philadelphia, Pa., A. Bonzano, and J. Griffen, Phoenixville, Pa., assignors to Clarke, Reeves & Co., Philadelphia, Pa. Pivot-bridge.....	Feb. 11, 1873	357	115	3	168
140, 471	Same.....Truss-bridge.....	July 1, 1873	109	37	4	17
140, 888	Clarke, T. C., Philadelphia, assignor to self, D. Reeves, A. Bonzano, and J. Griffen, Phoen- ixville, Pa. Constructing bridges.....	July 15, 1873	484	163	4	67
135, 081	Clarke, T. M., Winsted, Conn. Calk for horseshoes.....	Jan. 21, 1873	542	176	3	79
144, 017	Clarke, W. A., Milwaukee, Wis., assignor of one-half interest to E. P. Allis & Co. Mid- dlings-purifier.....	Oct. 28, 1873	600	{ 198 199 }	4	457
	Clarke, W. E. (See Rhoades, L., assignor.)					
138, 229	Clarkson, F. E., Highland, Kans., assignor of two-thirds interest to J. J. Strader, Jersey- ville, and G. F. Nelson, Chicago, Ill. Rotary churn.....	Apr. 29, 1873	896	283	3	472
136, 968	Clarkson, W. H., Bridgeville, Del. Fruit-crate.....	Mar. 18, 1873	553	183	3	308
	Clarridge, J. (See Wood, W. D., assignor.)					
138, 857	Class, G. C. A., Philadelphia, Pa. Piano pedal-attachment.....	May 13, 1873	359	111	3	537
136, 415	Class, W. F., assignor of one-fourth interest to T. D. Cottrell and W. L. B. Hughes, Cleve- land, Ohio. Bung.....	Mar. 4, 1873	54	19	3	250

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 722	Classon, N. A., Windham, Conn. Preparing cocoa-nut for use in pies, cakes, &c.....	Dec. 23, 1873	627		4	672
	Cloughton, H. O., et al. (See McClure, W. B., assignor.)					
136, 363	Clausolles, E. E. P., Barcelona, Spain. Water-meter.....	Mar. 4, 1873	8	3, 4	3	246
136, 416	Claussen, F. W., Mars Bluff, S. C. Barrel-support.....	Mar. 4, 1873	54	19	3	250
140, 765	Clay, R. J., New York. Toy automaton.....	July 15, 1873	379	130	4	58
143, 617	Clayton, H. & H., jr., and F. Howlett, London, England. Peat machine.....	Oct. 14, 1873	203	69	4	406
	Clayton, H. M. (See Hunter & Clayton.)					
140, 889	Clayton, W., jr., Bristol, Conn. Carpet-rag looper.....	July 15, 1873	484	104	4	67
144, 063	Cleary, D. M., assignor of one-half interest to J. F. Broadbent, Baltimore, Md. Device for opening oysters.....	Oct. 28, 1873	639	210	4	460
137, 761	Cleaveland, E. R., Boston, Mass. Supporter for men's drawers.....	Apr. 15, 1873	451	110	3	418
143, 964	Cleaveland, G. D., assignor of two-thirds interest to H. E. Davis and L. W. Hall, Flint, Ind. Hold-back.....	Oct. 28, 1873	549	182	4	453
142, 616	Cleaveland, R., Covington, Pa. Mode of connecting pitmen with shafts.....	Sept. 9, 1873	269	88	4	275
	Cleenewerck, B., et al. (See Alegeo, R. J., assignor.)					
135, 082	Clem, J. M. Opelika, Ala. Railway-rail joint.....	Jan. 21, 1873	543	176	3	79
	Clemen, A., et al. (See Simmons, T., assignor.)					
	Clemen, C. T., et al. (See Simmons, T., assignor.)					
140, 245	Clemens, S. L., Hartford, Conn. Scrap-book.....	June 24, 1873	746	235	3	701
137, 892	Clements, C. J., and E. P. Fowler, New York, N. Y. Pigeon-hole.....	Apr. 15, 1873	560	176	3	427
135, 777	Cleminshaw, B. F., Troy, N. Y. Lubricator.....	Feb. 11, 1873	358	115	3	168
139, 770	Cleminshaw, S., Troy, N. Y. Button-hole sewing-machine.....	June 10, 1873	313	97	3	650
	Cleminson, G. W. (See Corell, J. assignor.)					
139, 544	Clemmens, S. W., Cleveland, Ohio. Method of adjusting circular-saws.....	June 3, 1873	84	29	3	616
	Clemmons, A. J. (See Westbrook & Clemmons.)					
135, 408	Clemson, W., Middletown, N. Y. Buck-saw frame.....	Feb. 4, 1873	15	4	3	129
135, 628	Same..... Handle for saws.....	Feb. 11, 1873	232	73	3	158
145, 628	Same..... Saw-handle.....	Dec. 16, 1873	535	175	4	653
	Cleveland Non-Explosive Lamp Company. (See House, M. W., assignor.)					
141, 695	Clevenger, S., Vibbard, Mo. Harvester-rake.....	Aug. 12, 1873	264	85	4	164
136, 134	Clews, W., Ilion, N. Y. Cartridge retractor for revolving fire-arms.....	Feb. 25, 1873	702	227	3	220
143, 330	Click, B. F., Newark, Ind. Wood-sawing machine.....	Sept. 30, 1873	883	302	4	363
134, 853	Cliff, E., South Saint Louis, Mo. Spring for vehicles.....	Jan. 14, 1873	332	106	3	47
144, 064	Cliff, H. T., and J. E. Martin, assignors to G. H. Smith, T. Nourse, and N. D. Lapham, Detroit, Mich. Paper-ruling machine.....	Oct. 28, 1873	640	210	4	460
143, 063	Clifford, M. A., Boston, Mass. Broom-hanger.....	Sept. 23, 1873	661	226	4	328
143, 331	Clifford, W. P., West Jersey, assignor of one-half interest to L. and J. Garrison, Elmore, Ill. Grain separator and scourer.....	Sept. 30, 1873	884	302	4	363
	Clift, C. W. (See Robinson & Clift.)					
	Clift, I. D. (See Stevens, C. A., assignor.) (Reissue.)					
135, 466	Climax Mower and Reaper Company. (See Seiberling, J. F., assignor.)					
	Clime, J. C., assignor of one-half interest to A. Middleton, jr., Philadelphia, Pa. Device for transmitting power.....	Feb. 4, 1873	69	22	3	133
137, 596	Clinton, C. M., and E. J. Morgan, Ithaca, N. Y. Invalid-bedstead.....	Apr. 8, 1873	292	91	3	392
144, 384	Clinton, C. M., and L. Mood, Ithaca, N. Y. Calendar-clock.....	Nov. 11, 1873	188	64	4	505
145, 050	Clinton, E. H., Iowa City, Iowa. Harvester.....	Dec. 2, 1873	7	2, 3	4	586
138, 130	Clisbee, G., Marlborough, Mass. Embossing-press.....	Apr. 22, 1873	782	250	3	454
5, 672	Clogston, L. B., assignor of one-half interest to C. H. Sheldon, West Rutland, Vt. Gate for gang for marble-saws..... (Reissue.)	Dec. 2, 1873	208	71	4	602
139, 044	Closs, J., Decatur, Ind. Sample-holder for displaying boots, &c.....	May 20, 1873	522	165	3	563
142, 000	Closse, E. L., Cleveland, Ohio. Men's drawers.....	Aug. 19, 1873	541	178	4	196
142, 326	Cloud, C. M., Grinnell, Iowa. Agricultural boiler.....	Sept. 2, 1873	5	2	4	242
	Cloud, E. W. (See McNamee, J., assignor.)					
	Clough, C. F. (See Lincoln & Clough.)					
137, 179	Clough, C. F., and J. B. Lincoln, Providence, said Clough assignor to W. V. Phillips, Greene, R. I. Treadle for sewing-machines.....	Mar. 25, 1873	571	249	3	325
138, 858	Clough, T., assignor to self, A. T. Welch, H. Iden, and L. P. Hawes, New York, N. Y. Argand gas-burner.....	May 13, 1873	360	111	3	537
138, 859	Clouser, S. F., Salt Lake City, Utah. Operating steam or air brakes.....	May 13, 1873	361	112	3	537
	Cloutman, J. F. (See Hall, A. J., assignor.)					
145, 276	Clow, L. E., Saint Louis, Mo. Cooking-stove.....	Dec. 9, 1873	218	74	4	615
	Clubb, G. (See Hall, G., assignor.)					
136, 135	Clucas, T., jr., Saint Louis, Mo. Washing-machine.....	Feb. 25, 1873	703	227	3	220
142, 679	Same..... Lock-hinge for blinds.....	Sept. 9, 1873	321	107	4	280
	Clute, P. R. (See Foley, W. F., assignor.)					
139, 658	Coan, G. P., Wyandotte, Mich. Reciprocating churn.....	June 10, 1873	201	66	3	741
144, 018	Same..... Grain-basket.....	Oct. 28, 1873	602	199	4	457
145, 398	Coapman, E., assignor of one-half interest to B. H. Clark, Rochester, N. Y. Machine for bending hoops.....	Dec. 9, 1873	322	109	4	624
6, 725	Coates, F. J., Cincinnati, Ohio. Footstool for barbers' chairs..... (Design.)	June 24, 1873	.....	.....	3	691
142, 838	Coates, L., and J. T. Criswell, Collamer, Pa. Butter-print press.....	Sept. 16, 1873	464	157	4	302
	Coatsworth, J. (See Rogers, S., assignor.)					
	Cobaugh, D., administrator. (See Ball, E.) (Extension.)					
5, 297	Cobb, B. F., assignor to E. Prescott, West Troy, N. Y. Riveting tool..... (Reissue.)	Feb. 25, 1873	894	287	3	235
141, 764	Cobb, C., Charlestown, Mass. Coating canvas to form tarpaulins.....	Aug. 12, 1873	323	.....	4	169
139, 369	Cobb, J. G., Shoe Heel, N. C. Turpentine tool.....	May 27, 1873	826	265	3	596
138, 131	Cobb, J. M., Jackson, Tenn. Plow.....	Apr. 22, 1873	783	250	3	454
144, 509	Same..... Cotton-scraping plow.....	Nov. 11, 1873	289	98	4	513
140, 575	Cobb, R. W., Helena, Ala. Cotton-bale tie.....	July 8, 1873	215	72	4	37
144, 385	Cobleigh, C. C., Brighton, Mass. Combined lunch-box and shopping-bag.....	Nov. 11, 1873	189	64, 65	4	505
138, 075	Coburn, J. J., Philadelphia, Pa., assignor of one-half interest to H. B. Coyle. Friction-clutch mechanism.....	Apr. 22, 1873	741	234	3	451
	Coburn, J. P. (See Knight & Coburn.)					
142, 839	Cochran, A. W., Eufaula, Ala. Sewing-machine power.....	Sept. 16, 1873	466	157	4	302
144, 956	Cochran, J. T. L., Columbia, Tenn. Car-coupling.....	Nov. 25, 1873	683	231	4	568
144, 658	Cochran, W. A., assignor to self and J. T. Burch, Flat Rock, Ind. Car-coupling.....	Nov. 18, 1873	427	144	4	536
	Cochrane, J. (See Grady, P., assignor.)					
136, 136	Cochrane, J., New York, N. Y. Valve-lubricator.....	Feb. 25, 1873	704	227	3	220
136, 213	Same..... Preventing corrosion of stay-bolts in steam-boilers.....	Feb. 25, 1873	763	.....	3	225
139, 370	Cochrane, T. A., Jamestown, Cal. Feeder for quartz-mills.....	May 27, 1873	827	265	3	596
	Cochrane, T. M. (See Lewitt, W. H., assignor.)					
	Cockcroft, W. (See Ackroyd & Cockcroft.)					
142, 374	Cockcroft, W., and R. Ackroyd, assignors to selves and J. Massey, Chester, Pa. Stopping-mechanism for doubling and twisting machines.....	Sept. 2, 1873	47	16	4	216

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 230	Codd, H., Grove Lane, Camberwell, assignor of one-half interest to R. Barrett, London, England. Bottle for effervescing liquids.	Apr. 29, 1873	896	283	3	472
	Codding, A. E., <i>et al.</i> (See Sweet, F. M., assignor.) (Reissue.)					
	Codding, D. D., <i>et al.</i> (See Sweet, F. M., assignor.) (Reissue.)					
145, 051	Codman, J. T., Boston, Mass. Dental plugger.	Dec. 2, 1873	9	3	4	586
144, 256	Cody, H., New York, N. Y. Door-spring.	Nov. 4, 1873	74	24	4	484
144, 443	Coe, B. W., Des Moines, Iowa. Wagon-brake.	Nov. 11, 1873	237	80	4	509
141, 853	Coe, C. C., Hartford, Conn. Drying and disintegrating animal matter.	Aug. 19, 1873	411		4	186
140, 404	Coe, D. S., assignor to Chapin Machine Company, New Hartford, Conn. Vise.	July 1, 1873	55	20	4	13
	Coe, J., administrator. (See Coe & Sniffin.) (Disclaimer.)					
	Same. (Extension.)					
23, 826	Coe, J. H., deceased, and W. Sniffin, by J. Coe, administrator, Stratford, Conn. Skate-fastening. (Disclaimer filed)	Apr. 30, 1873			4	471
	Coe, J. H., deceased, by J. Coe, administrator, and W. B. Sniffin, Stratford, Conn. Skate-fastening. (Extension)	May 3, 1873			3	470
140, 116	Coe, J. H., Brighton, Mich. Device for elevating building-material.	June 24, 1873	640	201	3	692
	Coe, J. P. (See Masten, J., assignor.)					
136, 417	Coe, J. W., and D. Merritt, Williamsburgh, N. Y. Whip-socket.	Mar. 4, 1873	55	20	3	250
	Coe, S. S., <i>et al.</i> (See Shipherd & Curtis, assignors.)					
	Coe, S. S., <i>et al.</i> (See Shipherd, W. C., assignor.)					
145, 845	Coe, W., New Haven, Conn. Hoop-skirt.	Dec. 23, 1873	731	239	4	681
142, 771	Coes, L., Worcester, Mass. Manufacture of wrench-heads.	Sept. 16, 1873	410	138	4	297
144, 832	Same. Die for forging wrench-bars.	Nov. 25, 1873	583	199	4	559
137, 657	Coffee, G., and W. M. Bernard, Dixon, Cal. Vehicle.	Apr. 8, 1873	345	107	3	396
138, 616	Coffee, R. W., Big Spring, Va. Spoke-machine.	May 6, 1873	129	42	3	508
	Coffin, B. C. (See Kellogg & Coffin.)					
139, 771	Coffin, C. H., assignor of one-third interest to J. W. Morrison, Boston, Mass. Indicator for railway-cars.	June 10, 1873	315	98	3	650
134, 516	Coffin, D. N. E., jr., Boston, Mass. Steering-apparatus.	Jan. 7, 1873	13	5	3	8
134, 517	Same. Windlass.	Jan. 7, 1873	15	5	3	8
139, 872	Same. Windlass and capstan.	June 17, 1873	408	{ 127 128 }	{ 3 3 }	665
139, 454	Coffin, T. E., Boston, assignor of one half interest to W. R. Hoyt, Chelsea, Mass. Parlor-bedstead.	June 3, 1873	8	3		
	Coffin, G. S. (See Coffin, J. H. & G. S.)					
136, 033	Coffin, G. W., Pittsburgh, Pa. Car-coupling.	Feb. 18, 1873	593	195	3	200
138, 005	Coffin, J. H. & G. S., Danielsville, Pa. Machine for finishing slate-frames.	Apr. 22, 1873	673	213	3	446
6, 684	Coffin, J. M., Danielsville, Pa. Slate-frame. (Design)	May 27, 1873			3	586
136, 814	Cogan, A. J., Bon Homme, Dak. Wagon-seat.	Mar. 18, 1873	428	141	3	298
141, 631	Cogswell, E. R., New York, N. Y. Life-preserving garments.	Aug. 12, 1873	211	66	4	160
144, 957	Cogswell, T., Boston, Mass. Strap-coupling.	Nov. 25, 1873	683	231	4	568
137, 346	Cohen, L., and J. C. Waller, San Francisco, Cal. Presser-block for pants.	Apr. 1, 1873	63	30	3	362
141, 119	Cohen, R. L., Philadelphia, Pa. Manufacture of vapor-gas.	July 22, 1873	713		4	95
139, 496	Cohic, J. K., and D. H. Shartzer, West Hempfield Township, Pa. Measuring-funnel.	June 3, 1873	48	15	3	612
	Cohn, M. (See Gahren & Langlotz, assignors.)					
	Cohn, M. (See Gahren, C., assignor.) (Reissue.)					
137, 893	Cohn, M., New York, N. Y. Corset.	Apr. 15, 1873	561	176	3	427
140, 994	Coin, T. P., Boonesborough, Iowa. Sash-fastener.	July 22, 1873	603	204	4	86
143, 222	Cokly, B., Washington, D. C. Apparatus for loading and unloading wagons.	Sept. 30, 1873	791	273	4	355
140, 890	Colahan, C., Cleveland, Ohio. Mowing-machine.	July 15, 1873	485	164	4	67
145, 399	Colbert, I. C., Marysville, Ohio. Ratchet-wrench.	Dec. 9, 1873	324	109	4	624
142, 207	Colbrunn, T. E., Cleveland, Ohio. Gauged butter cutter and lifter.	Aug. 26, 1873	743	244	4	222
	Colburn, A. (See Hart, W. H., assignor.)					
5, 572	Colburn, G. F. J., Newark, N. J., assignor to W. M. Welling. Composition for dental plates, &c. (Reissue)	Sept. 16, 1873	582		4	312
5, 596	Same. Composition of matter. (Reissue)	Oct. 14, 1873	321		4	414
	Colby, A. H. (See Lombard, E., assignor.)					
	Colby, C. (See Ingham & Colby.)					
135, 629	Colby, E. B., Franklin, N. H. Ice-creeper.	Feb. 11, 1873	232	73	3	158
143, 809	Colby, F. W., Streator, Ill. Building-block.	Oct. 21, 1873	400	133	4	431
138, 379	Colby, G. J., Reading, Mich. Washing-machine.	Apr. 29, 1873	1, 031	325	3	482
139, 944	Colby, J. L., and L. B. Thomson, Saxonville, Mass. Medicine-spoon.	June 17, 1873	471	148	3	670
141, 854	Colby, J. S., New York, N. Y. Panier.	Aug. 19, 1873	411	134	4	186
136, 969	Caldwell, T., and G. L. Chadborn, Newburgh, N. Y. Lawn-mower.	Mar. 18, 1873	553	184	3	308
141, 120	Cole, A., and E. Davis, Saratoga Springs, N. Y. Sash-fastener.	July 22, 1873	713	238	4	95
	Cole, A. D. (See Abell & Cole.)					
136, 970	Cole, C., Meriden, N. H. Washing-machine.	Mar. 18, 1873	555	184	3	308
144, 065	Cole, C., Chatfield, Minn. Potato-bug exterminator.	Oct. 28, 1873	641	211	4	461
135, 968	Cole, C. G., Bennington, Vt. Hat and coat hook.	Feb. 18, 1873	536	177	3	195
139, 545	Cole, D. M., Elgin, Ill. Clothes-wringer.	June 3, 1873	85	29	3	616
137, 419	Cole, E. C., Pawling, N. Y. Wagon-seat.	Apr. 1, 1873	124	41	3	367
136, 214	Cole, E. R., Pawtucket, R. I. Steam-boiler.	Feb. 25, 1873	764	247	3	225
138, 076	Cole, H. C., Wallingford, Vt. Snow-shovel.	Apr. 22, 1873	741	235	3	451
140, 185	Cole, H. C., and E. D. Sabin, Wallingford, Vt. Sap-protector.	June 24, 1873	700	220	3	696
138, 380	Cole, I., Brooklyn, N. Y., assignor to C. C. Beggs & Co., Pittsburgh, Pa. Candle-mold tip.	Apr. 29, 1873	1, 032	325	3	483
	Cole, J. R. (See Lundgren, J., assignor.)					
141, 920	Cole, J. R., Morrisania, N. Y. Can for oil, &c.	Aug. 19, 1873	476	156	4	191
145, 400	Cole, J. R., New York, N. Y. Can for paints, &c.	Dec. 9, 1873	324	109	4	624
139, 772	Cole, J. W., Brooklyn, N. Y., assignor to the Tanite Company, Stroudsburg, Pa. Process of grinding journal boxes or bearings.	June 10, 1873	315	98	3	650
139, 773	Same. Machine for forming, shaping, and dressing journal-boxes.	June 10, 1873	316	98	3	650
139, 774	Same. Machine for dressing wheels, &c.	June 10, 1873	317	98	3	650
139, 775	Same. Machine for shaping or dressing wheels, &c.	June 10, 1873	318	99	3	650
145, 151	Cole, S. L., Brooklyn, N. Y. Production of turpentine from sawdust.	Dec. 2, 1873	104		4	594
141, 855	Cole, W., Milan, Tenn. Brick-machine.	Aug. 19, 1873	413	134	4	186
144, 510	Same. Earth-auger.	Nov. 11, 1873	290	98	4	514
138, 231	Coleman, F. E., Kirkwood, N. Y. Tire-bending machine.	Apr. 29, 1873	897	283	3	472
140, 016	Coleman, H. T., Williamsburgh, N. Y. Pump.	June 17, 1873	527	167	3	674
	Coleman, I. (See Mattfeld, H., assignor.)					
141, 034	Coleman, J. A., Providence, R. I. System of supplying steam, &c., to buildings for extinguishing fires.	July 22, 1873	637	215	4	88
140, 186	Coleman, J. W., Bridgeville, Mich. Hand corn-planter.	June 24, 1873	700	220	3	697
136, 705	Coleman, M., Ionia, Mich. Extension-table.	Mar. 11, 1873	321	106	3	280
	Coleman, T. C. (See Clark, J. M., assignor.)					
	Same. (See Dean & Coleman.)					

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	Coleman, T. C. (See Kelly, W., assignor) (Reissue.)					
143, 435	Coleman, T. F., Allegheny City, Pa. Axle for vehicles	Oct. 7, 1873	34	12	4	383
140, 576	Coles, A. D., Newark, N. J. Stove-foot shoe	July 8, 1873	216	72	4	37
138, 381	Coles, D. H., New York, N. Y. Sewing-machine	Apr. 29, 1873	1,033	325	3	483
143, 884	Coll, H., Millvale, Pa. Water-ejector	Oct. 21, 1873	463	155	4	436
	Collamer, T. (See Barbour, J. W., assignor.)					
5, 241	Collender, H. W., New York, N. Y. Billiard-table cushion (Reissue.)	Jan. 21, 1873	634	207	3	86
143, 500	Same..... Billiard-table ball-holder	Oct. 7, 1873	87	30	4	387
143, 885	Same..... Chalk-holder for billiard-tables	Oct. 21, 1873	463	156	4	436
145, 787	Same..... Billiard table	Dec. 23, 1873	683	224	4	677
	Collett, J. F. (See Gentry & Collett.)					
138, 478	Collier, J. W., New York, N. Y. Cooler for liquids	May 6, 1873	12	4	3	498
134, 786	Collier, W. C., Salford, England. Steam-drying cylinder	Jan. 14, 1873	273	89	3	42
139, 776	Collignon, A., C. O., and N., Closter, N. J. Folding-chair	June 10, 1873	318	99	3	650
	Collignon, C. O. (See Collignon, A., C. O., and N.)					
	Collignon, N. (See Collignon, A., C. O., and N.)					
135, 889	Collingbourne, J. J., New York, N. Y. Hand-truck	Feb. 18, 1873	476	153	3	191
	Collinge, R. (See Meyenberg & Collinge) (Design.)					
143, 064	Collings, W. H., Raytown, Mo. Pruning-instrument	Sept. 23, 1873	661	226	4	328
	Collins, B. (See Copeland, R. A., assignor.)					
	Collins, B. F., et al. (See Wright, H., assignor.)					
	Collins Company. (See Chapman, L., assignor.)					
	Same..... (See Jordan & Smith, assignors) (Reissue.)					
	Collins, C. S. (See Fleehearty, J. T., assignor.)					
136, 588	Collins, C. S., assignor of one-half interest to J. T. Fleehearty, Baltimore, Md. Vessel for steaming oysters	Mar. 11, 1873	227	76	3	273
139, 902	Same..... Ash-sifter	Mar. 18, 1873	499	165	3	303
139, 455	Collins, D., Newark, N. J. Manufacturing picks	June 3, 1873	9	3	3	609
134, 733	Collins, E., New York, N. Y. Foot-rest for chairs	Jan. 14, 1873	229	73	3	39
141, 121	Same..... Reclining-chair	July 22, 1873	714	238	4	95
145, 629	Collins, E. S., Trenton, Tenn. Cotton and hay press	Dec. 16, 1873	535	{ 175 176 }	{ 4 4 }	{ 653 653 }
134, 518	Collins, F., Portland, Me. Thread-cutter for sewing-machines	Jan. 7, 1873	15	5	3	8
134, 734	Collins, G. G., and J. A. Morrison, assignors of one-third interest to O. Wood, Philo, Ill. Earth-auger	Jan. 14, 1873	230	74	3	39
142, 208	Collins, G. W., West Lebanon, Pa. Apple-butter stirrer	Aug. 26, 1873	744	245	4	222
	Collins, H. H., et al. (See Wright, H., assignor)					
135, 691	Collins, J., Guelph, Canada. Harvester-rake	Feb. 11, 1873	288	91	3	162
145, 401	Collins, J., Hohokus Township, N. J., assignor to Hopkins & Dickinson Manufacturing Company. Door-key	Dec. 9, 1873	325	110	4	624
145, 630	Same..... Rail for sliding-doors	Dec. 16, 1873	536	176	4	653
	Collins, J. P., Norwich, Conn. Water-wheel (Extension.)	Dec. 6, 1873			4	585
5, 407	Same..... same (Reissue.)	May 13, 1873	459	145	3	545
6, 803	Collins, L. M., Lebanon, N. H. Band-saw frame (Design.)	Aug. 19, 1873			4	185
136, 971	Collins, M. H., Chelsea, Mass. Glass mold for forming lamp-chimneys	Mar. 18, 1873	555	184	3	308
145, 474	Collins, O. N., and P. B. Stiles, Cedar Rapids, Iowa. Draught-equalizer	Dec. 9, 1873	390	128	4	629
145, 723	Collins, W. A., Bloomfield, N. J. Dredging-machine	Dec. 23, 1873	628	206	4	672
140, 472	Collins, W. H., and C. E. Longden, Prospect, Conn. Manufacture of India-rubber rings	July 1, 1873	110	37	4	17
135, 890	Collins, W. T., Winchester, Ill. Car-coupling	Feb. 18, 1873	477	153	3	191
140, 473	Collyer, C. W., assignor to self and C. Tucker, Marblehead, Mass. Elevator	July 1, 1873	111	37	4	17
135, 891	Colman, N. J., Railroad Flat, Cal. Water-wheel	Feb. 18, 1873	477	154	3	191
	Colsten, H. V. (See Booth, E., assignor.)					
134, 979	Colton, J. H., et al. (See Stanton, J. W., assignor.)					
135, 499	Colton, S. B., Bloomfield, Conn. Medicated candy	Jan. 21, 1873	453		3	72
	Colton, W. R., Syracuse, N. Y. Driving-belt	Feb. 4, 1873	15	5	3	129
	Colt's Patent Fire-arm Manufacturing Company. (See Gaskell, J., assignor.)					
135, 264	Colver, A. B., and J. Priest, Albany, Oreg. Cultivator	Jan. 28, 1873	724	232	3	106
144, 890	Colvin, P., Pecatonica, Ill. Farmers' boiler	Nov. 25, 1873	631	214	4	563
138, 132	Colvin, R. J., Lancaster, Pa. Combined rake and tedder	Apr. 22, 1873	784	250	3	454
143, 123	Colvin, T., and R. M. Patchen, Meriden, Conn. Washing-machine	Sept. 23, 1873	705	242	4	332
	Colvin, W. S., et al. (See Burney, F., assignor.)					
137, 420	Colyar, E., Clayton, Iowa. Stump-extractor	Apr. 1, 1873	124	41	3	367
145, 555	Combes, F. A., Cleveland, Ohio. Ruler	Dec. 16, 1873	475	155	4	648
136, 035	Combes, W. M., Auburn, N. Y. Churn-dasher	Feb. 18, 1873	595	195	3	200
136, 034	Combs, A., Philadelphia, Pa. Wick-raiser for lamps	Feb. 18, 1873	594	195	3	200
144, 444	Combs, E. J., Pratsburgh, assignor of one-half interest to L. O. Dunning, Penn Yan, N. Y. Polishing compound	Nov. 11, 1873	238		4	509
143, 669	Combs, J. H., Stamford, Conn. Carriage-top joint	Oct. 14, 1873	246	83	4	409
	Comer, H. B., Worcester, Mass. Machine for rolling iron (Extension.)	Mar. 29, 1873				
137, 421	Comly, J., Philadelphia, Pa. Dummy engine	Apr. 1, 1873	126	41	3	367
143, 559	Compton, I. B., Seward, Nebr. Churn-dasher	Oct. 14, 1873	154	52	4	401
	Comstock, Castle & Co. (See Huntley, H. H., assignor.)					
	Same..... (See Shontz, A. S., assignor.)					
135, 083	Comstock, L. R., Baltimore, Md. Oyster-packing can	Jan. 21, 1873	543	177	3	79
139, 873	Same..... Manufacture of funnels	June 17, 1873	411	128	3	665
140, 577	Comstock, L. R., Philadelphia, Pa. Means for draining basins	July 8, 1873	216	72	4	37
141, 765	Comstock, L. R., Baltimore, Md. Heating-stove	Aug. 12, 1873	323	106	4	169
138, 737	Comstock, M., Chicago, Ill. Motor	May 13, 1873	253	79	3	528
145, 152	Conant, C. B., Lewiston, Me. Burnisher for photographs	Dec. 2, 1873	105	34, 35	4	594
	Conant, H., Lincoln, R. I. Machine for winding thread on spool (Extension.)	June 22, 1873			3	662
	Conaway, J., et al. (See Wilson, A., assignor.)					
	Condict, N. W., jr., et al. (See Stevens, W. J., assignor.)					
	Condit, I. D. (See Atwood, A., assignor.)					
140, 891	Condon, J. W., Logansport, Ind. Egg and cake beater	July 15, 1873	486	164	4	67
134, 644	Condon, S. E., Brooklyn, N. Y. Refrigerator	Jan. 7, 1873	137	44	3	17
	Condron, H. (See Lapham, R., assignor.)					
140, 465	Cone, D. D., and P. Polder, Panama, N. Y. Bolt and rivet cutter	July 1, 1873	56	20	4	13
6, 780	Cone, E. G., East Hampton, Conn. Hand-bell (Design.)	July 22, 1873			4	85
146, 046	Congdon, I. H., and J. E. House, Omaha, Nebr. Wire-stretcher	Dec. 30, 1873	931	300	4	707
136, 364	Conger, W. M., assignor to self and J. and J. Noon, Newark, N. J. Water-filter	Mar. 4, 1873	10	4	3	246
136, 589	Conger, W. M., Newark, N. J. Stove-platform	Mar. 11, 1873	228	76	3	273
137, 291	Same..... Stove-support	Apr. 1, 1873	11	4	3	358
137, 292	Same..... same	Apr. 1, 1873	12	4	3	358
138, 860	Conger, W. R., Newark, N. J. Sofa	May 13, 1873	361	112	3	537
140, 187	Conklin, E. E., New York, N. Y. Ice-elevator	June 24, 1873	701	{ 220 221 }	{ 3 3 }	{ 697 697 }

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 279	Conklin, T. F., Fond du Lac, Wis. Smoke-stack.....	Dec. 9, 1873	219	75	4	615
137, 180	Connable, R., Jackson, Mich. Kiln.....	Mar. 25, 1873	752	249	3	335
143, 670	Same..... Machine for making curved earthen pipes.....	Oct. 14, 1873	247	83	4	409
143, 671	Same..... Process of making curved earthen pipes.....	Oct. 14, 1873	248	.....	4	409
140, 810	Connel J M Newark, Ohio. Machine for grinding harvester-knives.....	July 15, 1873	421	142	4	62
140, 811	Same..... same.....	July 15, 1873	422	{ 142 143 }	{ 4 4 }	62
139, 116	Connell, J., jr., assignor to self and W. Connell, Collingwood, Canada. Preserving and packing compounds for eggs, wood, &c.....	May 20, 1873	593	.....	3	569
	Connell, J. P. (See Fogelstrand, O. F., assignor.) (Design.)					
	Same..... (See Penfield, C. W., assignor.)					
	Connell, W. (See Connell, J., jr., assignor.)					
135, 265	Connelly, B., Williamsburgh, N. Y. Device for feeding stoves.....	Jan. 28, 1873	725	232	3	106
136, 418	Same..... Device for emptying stoves.....	Mar. 4, 1873	56	20	3	250
	Conner, E. F. (See Hamilton & Conner.)					
136, 365	Conner, J., assignor to self and I. P. Wendell, Philadelphia, Pa. Pipe-coupling.....	Mar. 4, 1873	11	4	3	246
6, 573	Conner, J. M., New York, N. Y. Printing type..... (Design).....	Apr. 8, 1873	.....	.....	3	387
6, 574	Same..... Printing-type..... (Design).....	Apr. 8, 1873	.....	.....	3	387
7, 080	Conner, J. M., Greenville, N. J. Printing-type..... (Design).....	Dec. 30, 1873	.....	.....	4	698
144, 066	Same..... Type-casting machine.....	Oct. 22, 1873	641	211	4	461
	Conner, R. (See Wolford & Conner.)					
141, 035	Conner, W. M., assignor to A. G. Winston, Burlington, and A. V. Winston, Covington, Ky. Baling-press.....	July 22, 1873	639	215	4	89
142, 991	Conner, W. Z., Shelbyville, Ind. Weighing-scales.....	Sept. 23, 1873	598	203	4	323
	Conners, J. D., et al. (See Platt, A. L., assignor.)					
	Conners, T. K., et al. (See Platt, A. L., assignor.)					
143, 672	Connolly, J. D., Lincoln, Nebr., assignor of one-half interest to R. Doyle, Peoria, Ill. Striker for paper-ruling machines.....	Oct. 14, 1873	248	83	4	409
138, 232	Connor, J. P., and M. T. Hynes, Boston, Mass. Lantern.....	Apr. 29, 1873	898	283	3	472
139, 117	Connor, S. P., Conshohocken, and P. D. Pfisterer, Philadelphia, Pa. Shaft for vehicles.....	May 30, 1873	594	187	3	569
5, 361	Conover, S. B., New York, N. Y., assignor to J. A. Mount. Fruit-basket..... (Reissue).....	Apr. 22, 1873	867	275	3	461
135, 778	Conrad, E. E., assignor of one-half interest to M. Meir, Philadelphia, Pa. Lamp-shade holder.....	Feb. 11, 1873	359	115	3	168
145, 153	Conrad, S. A., Centralia, Ill. Hand-cultivator.....	Dec. 2, 1873	106	35	4	594
6, 456	Conradt, C. J., assignor to G. S. Griffith & Co., Baltimore, Md. Ottoman..... (Design).....	Feb. 25, 1873	.....	.....	3	218
141, 812	Conroy, J. W., Terry, Miss. Washing-machine.....	July 15, 1873	423	143	4	62
142, 899	Conroy, L., New York, N. Y. Screen for postal cards.....	Sept. 16, 1873	513	175	4	306
145, 154	Same..... Breech-loading fire arm.....	Dec. 2, 1873	106	35	4	594
	Consolidated Wax-Thread Sewing-Machine Co. (See Bean, E. E. and F., assignors.)					
133, 296	Constable, N., Carrollton, Ill. Fire-proof safe.....	May 27, 1873	773	245	3	591
136, 815	Converse, A. C., Boston, Mass. Apparatus for casting type.....	Mar. 18, 1873	428	142	3	298
144, 386	Converse, C. C., Erie, Pa. Car-coupling.....	Nov. 11, 1873	190	65	4	505
135, 969	Converse, G. C., Spencer, Mass., assignor to A. Wheelock, Charlton, Mass. Machine for pricking leather.....	Feb. 18, 1873	537	178	3	195
139, 045	Conzelman, J., Saint Louis, Mo. Medical compound.....	May 20, 1873	522	.....	3	563
138, 133	Coogan, O., Pittsfield, Mass. Leather boarding-machine.....	Apr. 22, 1873	785	251	3	454
135, 525	Cook, B. C., Richmond, Va. Broom-head.....	Feb. 4, 1873	120	38	3	137
	Cook, C. H. (See Grant & Cook.)					
145, 989	Cook, E. F., Omaha, Nebr. Damper for stoves.....	Dec. 30, 1873	881	285	4	703
	Cook, F. (See McClean, J., assignor.)					
	Cook, F. (See McMurtry, J., assignor)..... (Reissue).....					
135, 526	Cook, F., New Orleans, La. Bale-tie.....	Feb. 4, 1873	120	38	3	137
138, 479	Same..... same.....	May 6, 1873	13	4	3	498
138, 480	Same..... same.....	May 6, 1873	13	4	3	498
138, 481	Same..... Cotton-bale tie.....	May 6, 1873	14	5	3	498
138, 482	Same..... same.....	May 6, 1873	14	5	3	499
138, 483	Same..... same.....	May 6, 1873	15	5	3	499
138, 484	Same..... same.....	May 6, 1873	15	5	3	499
139, 777	Same..... same.....	June 10, 1873	319	99	3	650
140, 246	Same..... same.....	June 24, 1873	747	236	3	701
140, 766	Same..... same.....	July 15, 1873	379	130	4	58
142, 001	Same..... same.....	Aug. 19, 1873	542	179	4	196
142, 772	Same..... Bale-tie.....	Sept. 16, 1873	411	138	4	297
143, 223	Same..... same.....	Sept. 30, 1873	792	273	4	355
145, 847	Same..... same.....	Dec. 23, 1873	733	240	4	681
	Cook, F. G., et al. (See Knowlton, C. H., assignor.)					
	Cook, G., and H. I. Kimball, New Haven, Conn. Top-prop for carriages..... (Extension).....	Dec. 27, 1873	.....	.....	4	670
6, 798	Cook, G. K., New York, N. Y. Stamp pad and rack..... (Design).....	Aug. 12, 1873	.....	.....	4	159
136, 972	Cook, G. W., assignor of one-half interest to H. T. Weeks, Chicago, Ill. Devices to prevent retrograde motion of balance-wheels on sewing-machines.....	Mar. 18, 1873	556	185	3	308
141, 766	Cook, H. O., assignor to Marine Variometer Company, New York, N. Y. Solar compasses.....	Aug. 12, 1873	325	106	4	169
	Cook, I. (See Parker & Cook)..... (Reissue).....					
141, 325	Cook, I., Saint Louis, Mo. Rotary meter.....	July 29, 1873	921	301	4	119
	Cook, J. F., Baltimore, Md. Try-cock for steam-boilers..... (Extension).....	Sept. 20, 1873	.....	.....	4	296
	Cook, L. A., et al. (See Winsor, J. S., assignor)..... (Reissue).....					
145, 846	Cook, O. F., Grand Island, Cal. Process of preparing grain for manufacture into flour.....	Dec. 23, 1873	732	240	4	681
145, 724	Cook, R. F., West Potsdam, N. Y. Saw-set.....	Dec. 23, 1873	629	206	4	672
5, 276	Cook, S., Magnolia, Iowa, assignor by mesne assignment to the Automatic Boiler-Feeder Company. Automatic boiler-feeder..... (Reissue).....	Feb. 11, 1873	448	146	3	174
141, 036	Cook, S., Alpena, Mich. Saw.....	July 22, 1873	641	216	4	89
	Cook, S. E. (See Carroll, W. T., assignor.)					
	Cook, S. S. (See Whitaker & Cook.)					
	Cook, S. S. (See Whitaker, J., assignor.)					
145, 280	Cook, S. S., Woonsocket, R. I. Carriage-axle.....	Dec. 9, 1873	220	75	4	616
6, 987	Cook, T. G., Philadelphia, Pa. Drinking-glass, &c..... (Design).....	Nov. 11, 1873	.....	.....	4	504
	Cook, W. A. (See Burritt, H. H., assignor.)					
	Cooke, A. A. (See Weatherhead, O. E., assignor)..... (Reissue).....					
139, 546	Cooke, A., and D. W. Cross et al., Brooklandville, Md. Corn-row marker.....	June 3, 1873	86	30	3	616
138, 006	Cooke, G. K., New York, N. Y. Making rubber stereotypes.....	Apr. 22, 1873	674	213	3	446
	Cooke, G. L., et al. (See Weatherhead, O. E., assignor)..... (Reissue).....					
141, 632	Cooke, H. E., Cleveland, Ohio. Lawn or garden sprinkler.....	Aug. 12, 1873	212	67	4	160
5, 383	Cooke, J. T., Brooklyn, N. Y. Compound for coating roasted coffee..... (Reissue).....	Apr. 29, 1873	1, 115	.....	3	486
143, 501	Cooke, O. H., and F. Kenfield, Morristown, Vt. Toilet-rack.....	Oct. 7, 1873	88	30	4	387

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5,642	Cooke, R., New Hartford, N. Y., and T. Hanford, Norwich, Conn. Mechanism for shearing caps (Reissue)...	Nov. 4, 1873	176	59, 60	4	493
145,052	Cooke, R., New Hartford, N. Y. Machine for shearing hats	Dec. 2, 1873	10	3	4	586
144,833	Cooke, R. F., Brooklyn, N. Y. Horseshoe	Nov. 25, 1873	583	199	4	559
	Cooke, S. W., et al. (See Weatherhead, O. E., assignor) (Reissue.)					
141,921	Cooke, W., New York, N. Y. Clothes-line holder	Aug. 19, 1873	447	157	4	191
135,892	Cooke, W. Z., Hartford, Conn. Spring bed and frame	Feb. 18, 1873	478	154	3	191
143,886	Cooley, A. G., Hillsborough, Ohio. Wagon-jack	Oct. 21, 1873	465	156	4	436
145,930	Cooley, J., Albany, N. Y. Seat for school-desks	Dec. 30, 1873	828	270	4	699
	Cooley, L. C. (See Jones & Cooley.)					
139,547	Cooley, L. C., New York, N. Y., assignor to A. T. Jones, Clinton, Wis. Apparatus for preserving fruit	June 3, 1873	88	30	3	616
140,247	Cooley, L. C., Albany, N. Y. Apparatus for exhausting the air from fruit-cans and other vessels	June 24, 1873	747	236	3	701
	Cooley, W. T. (See Reed, A., assignor.)					
143,276	Cooley, W. T., assignor of one-half interest to D. H. Wells, Chicago, Ill. Earth-auger	Sept. 30, 1873	836	288	4	359
	Coolidge, F. S. (See French, E. S., assignor.)					
	Coombs, N. (See Hawkins, L. P., assignor.)					
	Coombs, W. (See Hood & Coombs.)					
	Coombs, W. F., et al. (See Brown, W. F., assignor.)					
143,436	Coon, P. J., Nunica, Mich. Siding-hook	Oct. 7, 1873	35	12	4	383
138,134	Cooney, W., assignor to Hockensmith & Cooney, Bridgeport, Conn. Shuttle for sewing-machines	Apr. 22, 1873	786	251	3	455
145,848	Cooper, A., assignor of one-half interest to M. E. Updegraf, Macomb, Ill. Cultivator	Dec. 23, 1873	734	240	4	681
143,560	Cooper, A. F., Cambridge, Mass. Car-wheel	Oct. 14, 1873	154	52	4	401
144,315	Same. Medicated pad or belt	Nov. 4, 1873	117	40	4	488
140,680	Cooper, C. E., Philadelphia, Pa. Cutting-boards for shoemakers, &c	July 8, 1873	302	101	4	41
143,502	Cooper, C. P., New York, N. Y. Bolster, pillow, &c	Oct. 7, 1873	88	30	4	388
139,703	Cooper, D. A., Worcester, England. Glove-fastening	June 10, 1873	250	79	3	645
135,084	Cooper, E. A., Lancaster, N. Y. Wrench	Jan. 21, 1873	544	177	3	79
137,181	Same. Indicator-lock	Mar. 25, 1873	753	249	3	335
144,511	Same. Nut-lock	Nov. 11, 1873	291	98	4	514
	Cooper, G. B. F. (See Stephens & Cooper.)					
135,085	Cooper, G. S., Baraboo, Wis. Feeding-screen for bran-dusters	Jan. 21, 1873	545	177	3	79
138,861	Same. Umbrella-support	May 13, 1873	362	112	3	537
	Cooper, J. (See Patterson, L., assignor.)					
145,094	Cooper, J. F., Frankton, Ind. Carpet-rag looper	Dec. 2, 1873	51	16	4	589
140,892	Cooper, J. H., and A. D. Emery, Philadelphia, Pa. Compound steam-engine	July 15, 1873	487	164	4	67
136,816	Cooper, J. W., Hubbard, Ohio, assignor to A. E. Rogers, La Grande, Oreg., and C. Roose, Newcastle, Pa., trustees. Rolls for rolling railway-rail	Mar. 18, 1873	430	142	3	298
136,817	Same. Means for buoying and stopping holes in vessels	Mar. 18, 1873	430	142	3	298
145,556	Cooper, M. J., New York, N. Y. Button-holder	Dec. 16, 1873	476	156	4	648
	Cooper, N. B. (See Hood, H. P., assignor.)					
135,779	Cooper, N. B., Liberty, Ind. Wagon-body	Feb. 11, 1873	359	116	3	168
143,437	Cooper, R. B., Monticello, N. Y. Feather-renovator	Oct. 7, 1873	36	13	4	383
	Cooper, S., et al. (See Roher, J. B., assignor) (Design.)					
141,492	Cooper, S. L., assignor of two-thirds interest to J. Lock and R. N. Williams, Lewistown, Pa. Passenger-registers	Aug. 5, 1873	76	24	4	141
138,233	Cooper, T., Philadelphia, Pa. Car-starter	Apr. 29, 1873	899	284	3	472
138,558	Cooper, T., Warwick, R. I. Lubricating-cup	May 6, 1873	82	26	3	504
135,970	Cooper, W. B., Albany, N. Y. Iron bridge	Feb. 18, 1873	538	178	3	196
142,557	Cooper, W. H., Lowell, Mass. Try-square	Sept. 9, 1873	219	71	4	271
140,248	Cooper, W. S., Philadelphia, Pa. Stop-cock	June 24, 1873	742	236	3	701
	Co-operative Manufacturing Company. (See Ellis, J. A. H., assignor.)					
144,257	Covert, W. R., London, Pa. Car-coupling	Nov. 4, 1873	75	24	4	484
	Cope, J. (See Mullooney, Cope & Brooks.)					
145,631	Copeland, R. A., Brooklyn, assignor to B. Collins, New York, N. Y. Plug or ferrule for stopping leaks in the tubes of steam-boilers	Dec. 16, 1873	537	176	4	653
	Copley, P. (See Gillott & Copley.)					
144,258	Copping, G. H., Toronto, Canada. Lozenge-cutting machine	Nov. 4, 1873	76	24, 25	4	484
137,532	Coppock, J. F., West Newton, assignor to J. D. Vinnedge, Indianapolis, Ind. Burglar-alarm	Apr. 8, 1873	239	73	3	388
	Coppuck, M. M., assignor to C. Noble & Co., Philadelphia, Pa. Cooking-stove (Design.)	Apr. 29, 1873			3	471
	Corban, A., et al. (See Hubbell, N. C., assignor.)					
134,854	Corbeil, J., Lind, Wis. Potato-bug collector	Jan. 14, 1873	332	106	3	47
141,326	Same. Car-starter	July 29, 1873	923	301	4	119
140,249	Corbin, E. A., and H. Albrecht, Philadelphia, Pa. Clothes-wringer	Jan. 24, 1873	749	237	3	701
138,862	Corbin, F., assignor to P. and F. Corbin, New Britain, Conn. Handle-plate for door-latches	May 13, 1873	363	112	3	537
	Corbin, J. S. (See Litchfield & Corbin.)					
	Corbin, P. and F. (See Arnold, S. D., assignor.)					
	Same. (See Corbin, F., assignor.)					
	Same. (See Munger, W. T., assignor.)					
	Same. (See White, G. W., assignor) (Design.)					
	Same. (See Widmayer, L., assignor) (Design.)					
135,467	Corby, A. B., Binghamton, N. Y. Machine for pointing pickets	Feb. 4, 1873	69	22	3	133
	Cordley, J. (See Thomson & Cordley.)					
138,007	Corell, J., New York, assignor of one-half interest to G. W. Clemison, Brooklyn, N. Y. Soluble chocolate	Apr. 22, 1873	675		3	446
142,084	Coreth, R., West Belleville, Ill. Gang-plow	Aug. 26, 1873	633	210	4	213
137,422	Corey, J. H., New York, N. Y. Electrical indicator for elevators	Apr. 1, 1873	127	41	3	367
143,673	Same. Culinary-boiler	Oct. 14, 1873	249	84	4	409
144,834	Same. Water-tank for hotels	Nov. 25, 1873	584	{ 199 } { 200 }	4	559
	Corey, T., et al. (See Springer, W. A., assignor.)					
136,137	Corfield, W., Chicago, Ill. Distilling together spirits of turpentine and alcoholic liquids	Feb. 25, 1873	706		3	220
144,387	Corliss, G. F., Mansfield, Ohio. Clothes-line reel	Nov. 11, 1873	191	65	4	505
145,725	Corliss, J. H., Reno, Nev. Combined tank and liquid measure	Dec. 23, 1873	629	206	4	672
137,061	Corliss, W., Providence, R. I. Burglar-proof safe	Mar. 25, 1873	646	214	3	327
145,053	Cornelius, C. E., Philadelphia, Pa. Drop-light for chandeliers	Dec. 2, 1873	11	4	4	586
140,347	Cornelius, R., Philadelphia, Pa. Drop-light for chandeliers	July 1, 1873	13	4	4	9
140,348	Same. same	July 1, 1873	14	4	4	9
139,945	Cornell, J. B., New York, N. Y. Fire-proof roof	June 17, 1873	472	148	3	670
141,696	Same. Fire-proof shutter	Aug. 12, 1873	265	86	4	164
144,259	Same. Metallic cornice and gutter	Nov. 4, 1873	77	25	4	484

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135, 630	Cornell, L. R., Brooklyn, N. Y. Evaporating-pan for salt, sugar, &c.	Feb. 11, 1873	233	73	3	158
142, 440	Same.....Steam-superheater for evaporating salt, and for other purposes.	Sept. 2, 1873	103	34	4	251
	Cornell, S. (See Hough, W. S., assignor.)					
137, 658	Cornell, S. V., New Haven, Conn. Folding table.	Apr. 8, 1873	346	107	3	397
	Cornell, T. L., et al. (See Harrington, I., assignor.)					
134, 735	Cornell, T. L., Derby, Conn. Bracelet.	Jan. 14, 1873	230	74	3	39
	Corning, C. N. (See Ladd & Corning.)					
135, 086	Cornwall, G., Brooklyn, N. Y. Spring attachment to car-window	Jan. 21, 1873	545	177	3	79
136, 138	Corr, C. W., Carlville, Ill. Hollow auger.	Feb. 25, 1873	706	228	3	220
	Corre, A. G., et al. (See Williams, H. B., assignor.)					
135, 692	Correa, J. A., Green Bay, Wis. Scissors	Feb. 11, 1873	290	91	3	162
141, 697	Corrigan, P., New York, N. Y. Screw-valve.	Aug. 12, 1873	266	86	4	161
	Corse, A. (See Parker, W., assignor.)					
	Corse, A. C. (See Fagan, M. G., assignor.)					
135, 631	Corser, G. A., assignor to self, A. Hankey, and J. E. Jones, Leicester, Mass. Bed-plate for rag or paper engines.	Feb. 11, 1873	234	74	3	158
	Corvin, J. (See Grimm & Corvin.)					
135, 693	Cory, L., Dalton, Ind. Boring-machine.	Feb. 11, 1873	290	92	3	162
135, 780	Cory, J., Chicago, Ill. Beater-press.	Feb. 11, 1873	360	116	3	168
137, 828	Cosby, O. G., Richmond, Va. Invalid-bedstead	Apr. 15, 1873	506	158	3	422
145, 557	Costello, A. B., Jersey City, N. J. Photographic background	Dec. 16, 1873	477	156	4	648
	Coston, B. F., deceased, by M. J. Coston, administratrix, Washington, D. C. Pyrotechnic night-signal					
	Coston, J., Bowdon, Ga. Cotton-chopper	Apr. 5, 1873			3	325
145, 849	Coston, M. J., administratrix. (See Coston, B. F.)	Dec. 23, 1873	734	240	4	681
	Coston, M. J., administratrix. (See Coston, B. F.)					
135, 694	Coté, L., Saint Hyacinthe, Canada. Machine for trimming and burnishing the soles of boots and shoes	Feb. 11, 1873	291	92	3	162
137, 293	Same.....Apparatus for trimming the heels of boots and shoes	Apr. 1, 1873	13	4	3	358
	Cotner, J. (See Fagaines, G. W., assignor.)					
	Cotten, M. J. (See Cotton, T. L., assignor.)					
137, 894	Cotten, T. L., assignor to M. J. Cotton, Water Valley, Miss. Plow.	Apr. 15, 1873	562	176	3	427
137, 597	Cotter, P. A., Boston, Mass. Fan-fly attachment for cylinder presses.	Apr. 8, 1873	294	91	3	392
	Cotterell, C. B. (See Walther, J., assignor.)					
144, 743	Cottingham, G. W., assignor to self and J. P. Cottingham, Saint Mary's, Tex. Ironing-machine.	Nov. 18, 1873	496	{ 168 } { 169 }	{ 4 }	541
	Cottingham, J. P. (See Cottingham, G. W., assignor.)					
135, 632	Cottle, H. W., Lynn, Mass. Bleaching buffed sole-leather	Feb. 11, 1873	235	.....	3	158
135, 087	Cottle, S., New York, N. Y. Manufacture of jewelry bases.	Jan. 21, 1873	546	178	3	79
135, 088	Same.....same	Jan. 21, 1873	546	178	3	79
140, 616	Same.....Device for manufacturing jewelry bases	July 8, 1873	252	85	4	40
145, 788	Same.....Bracelet-fastening	Dec. 23, 1873	681	224	4	677
	Cotton, F. B. (See Peaney & Cotton.)					
127, 347	Cottrell, C. B., Westerly, R. I. Rotary printing-press.	Apr. 1, 1873	64	20	3	362
140, 813	Same.....Printing-press	July 15, 1873	424	143	4	62
144, 316	Cottrell, H., Newark, N. J. Machine for cutting and working stone	Nov. 4, 1873	118	40	4	488
144, 317	Same.....Stone-sawing machine	Nov. 4, 1873	120	40	4	488
144, 318	Same.....Stone-cutting tool	Nov. 4, 1873	121	40	4	488
144, 744	Cottrell, H., Newark, N. J., assignor to Cottrell Stone Machinery Company, New York, N. Y. Polishing-tool	Nov. 18, 1873	497	169	4	542
144, 745	Same.....Carving-machine	Nov. 18, 1873	497	169	4	542
142, 147	Cottrell, I. B., Bridgeville, Del. Fruit-drier	Aug. 26, 1873	693	228	4	218
	Cottrell Stone Machinery Company. (See Cottrell, H., assignor.)					
	Cottrell, T. D., et al. (See Class, W. F., assignor.)					
145, 095	Coughlin, D., Fall River, Mass. Heater for steam-boilers.	Dec. 2, 1873	52	16	4	589
145, 990	Courtney, J. P., Brooklyn, N. Y. Pin for jewelry ornaments	Dec. 30, 1873	882	286	4	703
143, 065	Couse, F. P., Westfield, Mass. Whip	Sept. 23, 1873	662	227	4	328
142, 617	Coutant, F. J., New York, N. Y. Fountain hand-stamp	Sept. 9, 1873	269	88	4	275
	Covel, E. H., Brooklyn, N. Y. Gas-regulator	May 31, 1873	.....	.....	3	585
	Same.....Hydrocarbon-vapor apparatus	May 31, 1873	.....	.....	3	585
5, 465	Same.....Apparatus for charging air or gas with hydrocarbon vapors. (Reissue.)	June 24, 1873	839	266	3	708
139, 237	Covell, A. C., New York, N. Y. Device for teaching drawing	May 27, 1873	720	227	3	587
	Covell, E. T. (See Munger, A. S., assignor.)					
140, 474	Covert, E., Farmer Village, N. Y. Harness-fastening.	July 1, 1873	112	38	4	17
140, 475	Same.....Harness-fastening	July 1, 1873	112	38	4	17
141, 698	Same.....Harness	Aug. 12, 1873	266	86	4	164
143, 332	Covert, J. C., Farmer Village, N. Y. Snap-hook	Sept. 30, 1873	885	303	4	363
138, 234	Covert, L. B., Detroit, Mich. Extension step-ladder	Apr. 29, 1873	900	284	3	472
138, 738	Covey, S., and O. A. Slafter, McHenry, Ill. Wash-boiler.	May 13, 1873	254	79	3	528
134, 855	Cowan, R., Bloomfield, Ill. Combined corn-planter and seeder.	Jan. 14, 1873	333	{ 106 } { 107 }	{ 3 }	47
6, 512	Cowell, A., Kidderminster, England. Carpet	Mar. 25, 1873	.....	.....	3	325
136, 366	Cowell, J. J., Newark, N. J. Sash-balance	Mar. 4, 1873	12	4	3	246
141, 327	Cowell, R. A., Cleveland, Ohio. Car-mover	July 29, 1873	923	302	4	119
142, 810	Cowell, W. G., Wallingford, Conn. Oil-can.	Oct. 21, 1873	400	133	4	431
141, 699	Cowell, W. H., Columbus, Ohio. Axle-box and sleeve for vertical wheels.	Aug. 12, 1873	267	86	4	164
	Cowl, A. E. (See Barrett, J. C., assignor.)					
	Cowles, C., & Co. (See Hine, M., assignor.)					
5, 481	Cowles, E., Cleveland, Ohio, assignor by mesne assignment to E. Holmes, New York, N. Y. Mechanical movement for sewing-machines, &c.	July 8, 1873	368	{ 124 } { 125 }	{ 4 }	49
134, 980	Cowles, G. B., Bridgeport, Conn. Curtain-fixture.	Jan. 21, 1873	453	145	3	72
138, 790	Same.....Plumb-bob	May 13, 1873	300	92	3	532
137, 762	Cowles, H. D., Montreal, Canada, assignor to self and J. Terry, Terryville, Conn. Manufacture of horseshoe-nails.	Apr. 15, 1873	452	141	3	418
145, 336	Same.....Manufacture of nails.	Dec. 9, 1873	272	91	4	620
134, 787	Cowles, R., Cleveland, Ohio. Watchmaker's lathe.	Jan. 14, 1873	274	89	3	42
136, 215	Cowles, S. F., Coventry, Vt. Milk-cooler	Feb. 25, 1873	765	247	3	225
	Cox, A. M. (See Oliver, B. A., assignor.)					
139, 297	Cox, C., Covington, Ga. Soldering compound	May 27, 1873	774	.....	3	541
137, 895	Cox, C. A., Jeffersonville, assignor of two-thirds interest to E. M. Gardner, Bedford, Ind. Fire-extinguisher	Apr. 15, 1873	563	176	3	427
	Cox, C. E., executrix. (See Sabin, H. W.)					
134, 520	Cox, G., Pierrepont, N. Y. Water-wheel	Jan. 7, 1873	17	6	3	6
439, 704	Cox, H., Peterborough, Canada. Friction-attachment for securing pulleys to shafts, &c.	June 10, 1873	251	79	3	645

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
143, 438	Cox, J. B., San Francisco, Cal. Burial-case.....	Oct. 7, 1873	36	13	4	384
135, 089	Cox, S., and W. W. Fanning, Richmond, Ind. School-desk.....	Jan. 21, 1873	547	178	3	79
	Cox, S. E. (See Bell, F. G., assignor.)					
135, 321	Cox, T., and W. Holland, Birmingham, England. Manufacture of runners and top-notches for umbrellas.....	Jan. 28, 1873	770	249	3	110
	Cox, T. A. (See Irvin & Cox.)					
134, 519	Cox, V., New Vienna, Ohio. Mode of attaching pitmen to sickle-bars.....	Jan. 7, 1873	16	6	3	9
141, 328	Cox, W. J., and W. T. Smith, Lilesville, N. C. Cotton-planter.....	July 29, 1873	924	302	4	119
145, 931	Cox, W. M., Blanket Hill, Pa. Device for converting motion.....	Dec. 30, 1873	829	270	4	699
	Cox, W. P. (See Peace & Cox.)					
136, 706	Coy, F. W., East Cambridge, assignor to W. Butterfield, Boston, and C. Keniston, Somerville, Mass. Machine for pressing soles.....	Mar. 11, 1873	322	107	3	280
138, 863	Coykendall, J., Farmington, Ill. Shoe-fastener.....	May 13, 1873	363	113	3	537
	Coyle, H. B. (See Colburn, J. J., assignor.)					
	Coyle, J. (See Gallagher & Coyle.)					
139, 548	Coyne, J., Pittsburgh, Pa., assignor to self and R. Chessman, Borough of Etua, Pa. Apparatus for assorting nails.....	June 3, 1873	89	30	3	616
141, 329	Cozzens, W. F., and W. H. Wiggin, Saint Louis, Mo. Machine for bending sheet-metal.....	July 29, 1873	925	302	4	119
6, 352	Crabtree, B., jr., Philadelphia, Pa. Carpet..... (Design)	Jan. 21, 1873			3	70
6, 353	Same..... (Design)	Jan. 21, 1873			3	70
6, 865	Crabtree, J., assignor to Leedom, Shaw & Stewart, Philadelphia, Pa. Carpet..... (Design)	Sept. 2, 1873			4	241
6, 866	Same..... (Design)	Sept. 2, 1873			4	241
142, 327	Craft, J. C., Baltimore, Md. Hammock-lounge.....	Sept. 2, 1873	5	2	4	242
	Craft, M., Bellaire, Ohio. Paper-file.....	Nov. 11, 1873	292	99	4	514
144, 512	Craig, J. (See Allenwood, J. M., assignor.)..... (Reissue)					
144, 445	Craig, J. B., Perrysville, Pa. Foot-warmer.....	Nov. 11, 1873	238	80	4	509
144, 446	Same..... Artificial stem for cut-flowers.....	Nov. 11, 1873	239	80	4	509
136, 419	Craig, J. B., and M. Haughey, Saint Louis, Mo. Police-nippers.....	Mar. 4, 1873	56	20	3	250
	Craig, R. (See Siddons, W. P., assignor.)					
	Craig, R. R. (See Allenwood, J. M., assignor.)..... (Reissue.)					
135, 090	Craig, R. S., Cincinnati, Ohio. Handle for brushes.....	Jan. 21, 1873	548	178	3	79
	Craig, S. H., et al. (See Smith, A. C., assignor.)					
142, 773	Craig, W., Newark, N. J., and H. L. Brevoort, Kings County, N. Y. Pressure-regulating valve.....	Sept. 16, 1873	412	139	4	297
135, 206	Craigie, H. H., New York, N. Y. Waste-trap for wash-basins.....	Jan. 28, 1873	669	215	3	101
143, 887	Craik, R., Money Creek, Minn. Feeding-device for middlings-purifiers.....	Oct. 21, 1873	465	156	4	436
138, 995	Crain, E. T., Kansas City, Mo. Hair-curling.....	May 20, 1873	483		3	560
142, 558	Craine, G., and J. W. Bloss, Fairfield, Iowa. Elevated oven-attachment for stoves.....	Sept. 9, 1873	220	71	4	272
135, 091	Cram, A. W., Litchfield, Ill. Steam water-elevator and injector.....	Jan. 21, 1873	548	179	3	79
135, 527	Same..... Railway-switch.....	Feb. 4, 1873	121	38	3	137
139, 118	Cram, A. W., Saint Louis, Mo. Lock for sliding doors.....	May 20, 1873	595	187	3	569
139, 659	Cram, A. W., Litchfield, Ill. Spark-arrester.....	June 10, 1873	201	66	3	641
140, 017	Same..... Elevator.....	June 17, 1873	528	167	3	674
138, 864	Cram, W., New York, N. Y. Rotary steam-engine.....	May 13, 1873	364	113	3	537
140, 117	Cramer, A., assignor to self and F. Huettmann, Detroit, Mich. Cigar-trimmer.....	June 24, 1873	641	201	3	692
138, 739	Cramer, J., Monee, Ill. Wash-boiler.....	May 13, 1873	255	79	3	528
144, 319	Cramer, P., Jersey City, N. J. Centrifugal machine for draining sugar.....	Nov. 4, 1873	122	41	4	488
	Cramer, W. H. (See Bogart, Cramer & Lewis.)					
136, 590	Crandall, E. H., Chicago, Ill. Pencil-sharpener.....	Mar. 11, 1873	228	77	3	273
136, 707	Crandall, B. P., jr., and W. Twiddy, Williamsburgh, N. Y. Combined rocking-horse and swing.....	Mar. 11, 1873	323	107	3	280
134, 856	Crandall, J. A., Brooklyn, N. Y. Child's carriage.....	Jan. 14, 1873	334	107	3	47
137, 896	Same..... Hobby-horse.....	Apr. 15, 1873	563	177	3	427
139, 371	Same..... Hobby-horse swing.....	May 27, 1873	828	265	3	596
143, 333	Crandall, J. W., assignor to self and W. Holmes, Homer, N. Y. Corner-fastening for wagon-boxes.....	Sept. 30, 1873	886	303	4	363
141, 700	Crandall, N., Wooster, Ohio. Wagon-jack.....	Aug. 12, 1873	267	87	4	165
134, 521	Crandall, W. J. C., Steele's, Ind. Corn-planter.....	Jan. 7, 1873	17	6	3	9
139, 660	Crandell, W. Westfield, N. Y. Railway-rail joint.....	June 10, 1873	202	66	3	641
135, 781	Crane, A. J., Waterbury, Vt. Meat-crusher.....	Feb. 11, 1873	361	116	3	168
144, 835	Crane, A. J., and D. J. Hadley, Cambridge, Vt. Milk-cooler.....	Nov. 25, 1873	586	200	4	559
136, 818	Crane, C. S., and W. H. Lavinia, Chicago, Ill. Screw-cutting machine.....	Mar. 18, 1873	431	143	3	298
142, 148	Crane, D., assignor to self and C. A. Lee, Saginaw, Mich. Fruit-crate.....	Aug. 26, 1873	694	228	4	218
	Crane, E. B. (See Babcock, Leonard & Crane.)					
137, 598	Crane, E. W., Roselle, N. J. Heating-furnace.....	Apr. 8, 1873	295	91	3	392
	Crane, F. (See Aikin & Stone, assignors)..... (Reissue.)					
145, 789	Crane, G. R., Painesville, Ohio. Valve.....	Dec. 23, 1873	685	224	4	677
	Crane, J. S., et al. (See Young, C. H., assignor.)					
	Crane, L., et al. (See Crowell, L. C., assignor.)					
141, 767	Crane, M. G., Newton, Mass. Wrench.....	Aug. 12, 1873	325	106	4	169
143, 748	Crane, W. S., Rome, Ga. Fastening for coffins.....	Oct. 21, 1873	346	115	4	426
138, 791	Crane, W. W., Auburn, N. Y. Sectional steam-generator.....	May 13, 1873	300	92	3	532
138, 792	Same..... same.....	May 13, 1873	301	92, 93	3	532
138, 793	Same..... Device for applying steam power to street railway-cars.....	May 13, 1873	302	93	3	532
138, 794	Same..... Car-axle box.....	May 13, 1873	303	93	3	532
139, 549	Same..... Compound steam-engine.....	June 3, 1873	89	31	3	616
140, 814	Craner, G. W., Darby, Pa. Waste-removing device for carding-machines.....	July 15, 1873	424	144	4	62
	Cranmer, W. C., et al. (See Fewkes, J. T., assignor.)					
144, 513	Cranneil, D., Amsterdam, N. Y. Paper-box fastening.....	Nov. 11, 1873	293	99	4	514
134, 857	Cranston, J. H., Norwich, Conn. Slotting and key-seat machine.....	Jan. 14, 1873	335	107	3	47
144, 019	Same..... Blind-stop.....	Oct. 28, 1873	602	199	4	457
145, 402	Cranston, J. H. Norwich, Conn., assignor to C. Potter, jr., New York, N. Y. Mechanical movement.....	Dec. 9, 1873	326	110	4	624
143, 404	Cratar, C. H., North Kingsville, Ohio. Coupling for vehicles.....	Oct. 7, 1873	6	2	4	381
140, 893	Craven, J. J., Jersey City, N. J. Device for securing man-hole covers.....	July 15, 1873	488	165	4	67
5, 229	Craven, T. C., Northampton, Mass., assignor to B. H. Jenks, Philadelphia, Pa. Cotton-gin saw..... (Reissue.)	Jan. 14, 1873	427	137	3	54
135, 528	Craven, T. C., Hudson, N. Y. Machine for making cotton-laps.....	Feb. 4, 1873	122	38, 39	3	137
136, 036	Craven, W. D., Jersey City, N. J. Preparing blood for purifiers.....	Feb. 18, 1873	595		3	200
144, 659	Crawford, R. R., Wytheville, Va. Game-table.....	Nov. 18, 1873	427	144	4	536
141, 426	Cregier, D. C., Chicago, Ill. Stop-gate in water-mains.....	Aug. 5, 1873	15	4	4	136
5, 580	Creighton, J. R., Boston, Mass., assignor of one-half interest to O. B. Hall, 2d. Speaking-tube..... (Reissue.)	Sept. 30, 1873	946	320	4	367
138, 865	Crenshaw, W. T., Burton, Tex. Revolving cotton-lint room.....	May 13, 1873	364	113	3	537

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page
138, 617	Crippen, H. M., Bartlett, assignor of one-half interest to J. C. Wilson, Plymouth, Ohio. Swaging-machine	May 6, 1873	130	42	3	508
142, 680	Crippen, I. A., assignor of one-half interest to S. Lowder, Philadelphia, Pa. Lifting-jack	Sept. 9, 1873	321	107	4	280
142, 559	Crisp, J. E., Charlestown, Mass. Rotary engine	Sept. 9, 1873	220	72	4	272
142, 209	Crist, J., Tiffin, Ohio. Car-coupling	Aug. 26, 1873	744	245	4	222
142, 002	Criswell, J. A., Mifflintown, Pa. Legislative voting-apparatus	Aug. 19, 1873	542	179	4	196
136, 037	Criswell, J. T. (See Coates & Criswell.)					
136, 489	Critchlow, T., Baldwin, Pa. Manner of punching bolt-holes in steel railway-rails	Feb. 18, 1873	596	196	3	200
	Same. Hydraulic valve	Mar. 4, 1873	119	39	3	255
	Crites, W. F. (See Blaisse & Crites.)					
141, 330	Crittenden, J. H., Fall River, Mass. Method of coating and ornamenting walls and ceilings	July 29, 1873	927		4	119
	Crittenden, L. C., et al. (See Hume, G. H., assignor.)					
141, 493	Crocker, G. D., San Francisco, Cal. Stamp for crushing ores	Aug. 5, 1873	77	24	4	141
139, 456	Crocker, J. D., Norwich, Conn. Friction-clutch pulley	June 3, 1873	10	3	3	609
144, 067	Crocker, L. C., Hopedale, Mass. Spindle	Oct. 28, 1873	642	211	4	461
135, 266	Crocker, R., Marshalltown, Iowa. Leather-cutting machine	Jan. 28, 1873	726	232	3	106
137, 829	Crocker, S., Port Allen, Iowa. Cloth-measuring register	Apr. 15, 1873	507	158	3	422
137, 294	Crockett, E., Macon, Ga. Horse-power	Apr. 1, 1873	13	4	3	358
139, 874	Crockett, S. J., Boston, Mass. Reed-organ	June 17, 1873	411	128	3	665
5, 673	Croft, E., Waterbury, Conn. Machine for threading screw-blanks	Dec. 2, 1873	208	71	4	602
142, 560	Same. same	Sept. 9, 1873	223	72, 73	4	272
	Croft, S., executor. (See Liebrich, C.)					
145, 337	Crofutt, G. A., New York, N. Y. Eye and lung protector	Dec. 9, 1873	273	91	4	620
137, 062	Croghan, J., Chicago, Ill. Combined chair, table, and lounge	Mar. 25, 1873	647	215	3	327
140, 681	Croghan, P., Cockeysville, Md. Method of splitting stone	July 8, 1873	303	102	4	44
	Croissant, E. (See Bertonnaire, L. M. F., assignor.)					
143, 124	Cromer, F., Galveston, Tex. Cotton-bale tie	Sept. 23, 1873	706	242	4	332
	Crompton, G. (See Duckworth, J. C., assignor.)					
140, 476	Crompton, G., Worcester, Mass. Loom-shedding mechanism	July 1, 1873	113	38	4	17
140, 894	Same. Loom	July 15, 1873	489	165	4	67
141, 768	Same. Loom-shedding mechanism	Aug. 12, 1873	326	107	4	170
142, 441	Same. Shuttle-box mechanism	Sept. 2, 1873	105	34	4	251
	Crompton, W., et al. (See Brubaker, A. M., assignor.)					
141, 494	Crone, W., Galveston, Tex. Cotton-bale tie	Aug. 5, 1873	77	24	4	141
139, 550	Cronin, M., Washington, D. C. Compound hose-pipe	June 3, 1873	91	31	3	616
144, 958	Same. Fireman's ladder	Nov. 25, 1873	684	231	4	568
5, 428	Crook, C., New Hope, Pa., assignor to M. G. Hubbard. Harvester	May 27, 1873	909	293	3	602
5, 429	Same. same	May 27, 1873	910	293	3	602
142, 774	Crooke, J. J., Southfield, and L. Crooke, New York, N. Y. Machine for forging solid-belted hinge-pivots	Sept. 16, 1873	413	139	4	298
	Crooke, L. (See Crooke, J. J. & L.)					
136, 038	Crooker, H. D., Chester, Pa. Clothes-washer	Feb. 18, 1873	597	196	3	200
141, 022	Crookes, J., assignor of one-half interest to J. H. Branch, Saint Louis, Mo. Saw	July 22, 1873	716	238	4	95
141, 427	Same. Removable saw-teeth		16	4	4	136
	Crooley, A. (See Van Wert & Crooley.)					
137, 182	Cropper, T. E., Suffolk, Va. Measuring-funnel	Mar. 25, 1873	755	250	3	335
5, 448	Crosby, C. O., and H. Kellogg, Milford, assignors to Elm City Company, New Haven, Conn. Machine for producing folded trimmings	June 17, 1873	613	193	3	682
	Same. same			194		
140, 018	Crosby, G. H., East Somerville, Mass. Registering steam-gauge	June 17, 1873	529	168	3	675
145, 726	Same. Pressure-gauge	Dec. 23, 1873	630	206	4	672
	Same. same			207		
145, 155	Crosby, J. E., New York, N. Y. Mucilage-cup	Dec. 2, 1873	108	35	4	594
	Crosby, L. M. (See Cameron, E. G., assignor.)					
144, 959	Crosby, L. M., and E. G. Cameron, said Cameron assignor to said Crosby, Ashtabula, Ohio. Bed-bottom	Nov. 25, 1873	686	232	4	568
140, 477	Cross, A. T., Providence, R. I. Pencil-case	July 1, 1873	114	39	4	17
140, 478	Same. Pen-holder	July 1, 1873	114	39	4	17
142, 992	Cross, C. G., Chicago, Ill. Drill for boring artesian wells	Sept. 23, 1873	599	203	4	323
	Cross, D. (See Westcott, N., assignor.)					
	Cross, D. W. (See Cooke & Cross.)					
139, 661	Cross, G. J., Greenwich, England. Wheel for vehicles	June 10, 1873	203	66	3	641
141, 037	Cross, J. E., assignor to Illinois Manufacturing Company, Adrian, Mich. Deck-sash or ventilator-opener for railway-cars	July 22, 1873	642	216	4	89
141, 856	Cross, J. E., Adrian, Mich. Car-lamp	Aug. 19, 1873	413	134	4	186
5, 377	Cross, J. R., New York, N. Y., assignor to self and A. J. Bastine. Process of transferring the grain-marks of wood	Apr. 29, 1873	1, 110	351	3	488
136, 819	Cross, L. D., Phelps, N. Y. Gauge for setting carriage axle-trees	Mar. 18, 1873	432	143	3	298
142, 993	Cross, T. H., East Boston, Mass. Car-coupling	Sept. 23, 1873	600	204	4	323
6, 368	Cross, W. T., Kewanee, Ill. Monument	Jan. 23, 1873			3	100
142, 149	Crossland, H. S., Dresden, Tex. Weeding-hoe	Aug. 26, 1873	694	228	4	218
139, 705	Crossley, T., Bridgeport, Conn. Printing and dyeing fabrics	June 10, 1873	251		3	645
139, 706	Same. Printed pile carpets	June 10, 1873	252		3	645
141, 038	Same. Cleaning wool of burrs, &c	July 22, 1873	642		4	89
134, 522	Crossman, C. P., assignor of half-interest to F. Bemis, West Warren, Mass. Fire-proof paint	Jan. 7, 1873	19		3	9
	Crossman, E. (See Lalor, T., assignor.)					
5, 692	Crossman, M., and P. A. Spicer, Marshall, Mich. Windmill	Dec. 23, 1873	803	263	4	686
136, 039	Crosthwait, G. D., Murfreesborough, Tenn. Car-coupling	Feb. 18, 1873	598	196	3	200
145, 281	Crouch, F. J., San José, Cal. Steam and air engine	Dec. 9, 1873	222	75	4	616
140, 682	Croughton, G., Worcester, Mass. Loom-shedding mechanism	July 8, 1873	304	102	4	44
142, 085	Croughwell, E., A. Tillman, and E. L. Vanderburg, San Francisco, Cal. Harness-attachments	Aug. 26, 1873	639	210	4	214
	Crow, J. R. (See Martindale, H., assignor.)					
140, 349	Crowe, G. W., Cincinnati, Ohio. Railway-car brake	July 1, 1873	15	4	4	9
143, 224	Crowell, A. F., Hyannis, Mass., assignor to G. H. Clarke, Brooklyn, N. Y. Grate-bar for upsetting tires	Sept. 30, 1873	792	273	4	355
	Crowell, C. L., and R. Smith, deceased, by W. Loucks, executor, Peoria, Ill. Machine for upsetting tires	May 17, 1873			3	27
139, 875	Crowell, J. H., assignor by mesne assignment to J. & J. H. Kendrick, and J. H. Crowell, Providence, R. I. Heddle-eye opener	June 17, 1873	412	129	3	665
144, 320	Crowell, J. H., assignor to self and J. & J. H. Kendrick, Providence, R. I. Machine for making weavers' harness	Nov. 4, 1873	123	41	4	488

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 282	Crowell, J. H., assignor to the Kendrick Loom-Harness Company, Providence, R. I. Machine for making weavers' harness.	Dec. 9, 1873	223	76	4	616
134, 736	Crowell, L. C., Boston, Mass., assignor of three-fourths interest to E. and N. Dillingham. Heel-stiffener.	Jan. 14, 1873	231	74	3	39
137, 533	Crowell, L. C., assignor to J. Smith, Boston, and L. Crane, Cambridge, Mass. Method of constructing paper bags.	Apr. 8, 1873	239	73	3	388
139, 238	Crowell, L. C., Boston, Mass. Heel-stiffener.	May 27, 1873	721	227	3	587
143, 674	Same. Paper-bag machine.	Oct. 14, 1873	250	84	4	409
141, 428	Crowley, J., assignor of one-half interest to W. C. Leyburn, Sparta, Wis. Thrashing-machine.	Aug. 5, 1873	17	4	4	136
135, 971	Crowley, J. J., Whistler, Ala. Car-ventilator.	Feb. 18, 1873	539	178	3	196
135, 410	Crowley, T. L., Parker Township, Pa. Reversing link-motion engine.	Feb. 4, 1873	16	5	3	129
140, 350	Crowth, W. B., Philadelphia, Pa. Funnel.	July 1, 1873	15	5	4	9
144, 260	Crozier, A. H., New York, N. Y. Car-starter.	Nov. 4, 1873	78	25	4	484
140, 479	Crum, G. C., Barr's Store, Ill. Automatic gate.	July 1, 1873	115	39	4	17
	Crum, J. S. (See Hulse & Crum.)					
139, 119	Crum, J. S., Palmyra, Ill. Pruning-knife.	May 20, 1873	596	187	3	569
134, 858	Crumb, W. R., Buffalo, N. Y. Inhaler.	Jan. 14, 1873	336	107	3	47
142, 003	Crumbie, A., Brooklyn, N. Y. Reel for ovens.	Aug. 19, 1873	544	180	4	196
143, 439	Crumlish, H., Buffalo, N. Y. Mode of operating bellows of furnaces.	Oct. 7, 1873	37	13	4	384
6, 649	Crump, C. H., Boston, Mass. Bolster for knives or forks. (Design).	May 13, 1873			3	527
6, 962	Crump, C. H., assignor to W. E. Baker, Boston, Mass. Grape-arbor. (Design).	Oct. 21, 1873			4	425
146, 049	Crump, E., Waterloo, Wis. Windmill.	Dec. 30, 1873	934	301	4	707
146, 047	Crump, J., Philadelphia, Pa. Safe and vault.	Dec. 30, 1873	931	301	4	707
146, 048	Same. same.	Dec. 30, 1873	933	301	4	707
141, 331	Crump, S. H., Reading, Pa. Corpse-cooler.	July 29, 1873	927	302	4	119
138, 382	Crumpton, J. C., Allegheny City, Pa. Composition for kindling fires.	Apr. 29, 1873	1,034		3	483
143, 066	Same. Fire-kindler.	Sept. 23, 1873	662	227	4	328
143, 277	Same. same.	Sept. 30, 1873	837	288	4	359
144, 321	Crutcher, S., Little Mount, Ky. Cultivator.	Nov. 4, 1873	124	41	4	488
	Crystal Glass Company. (See Bennett, Krebs & Haley, assignors.)					
136, 139	Cubberley, G. B., Milwaukee, Wis. Blacksmith's hammer.	Feb. 25, 1873	707	228	3	220
142, 150	Cubberley, H. S., and D. Mann, Bloomington, Ill. Railway water-crane.	Aug. 26, 1873	695	229	4	218
136, 490	Cuddy, J., assignor to self and E. A. Kitzmiller, Pittsburgh, and J. J. McDermott, Allegheny, Pa. Process of treating and drying cigars.	Mar. 4, 1873	120		3	255
135, 695	Cuff, J., Emery, Ohio. Land-marker.	Feb. 11, 1873	292	92	3	162
142, 004	Culbertson, W. C., Girard, Pa. Pump-piston.	Aug. 19, 1873	545	180	4	196
139, 046	Cullen, J., Oxford, Miss. Railway-switch signal.	May 20, 1873	522	165	3	563
137, 830	Cullen, T., Blackstone, Mass. Dovetailing-machine.	Apr. 15, 1873	508	159	3	422
	Cullings, P. V. W. (See Zeh, Livingston & Cullings.)					
134, 645	Culmer, J. W., assignor of three-fourths interest to G. B. Edwards and A. Howard, Pittsburgh, Pa. Railway-car spring.	Jan. 7, 1873	138	44	3	17
134, 646	Same. same.	Jan. 7, 1873	138	44	3	17
135, 468	Culp, J. D., Gilroy, Cal. Curing tobacco.	Feb. 4, 1873	70		3	133
6, 972	Culter, R. A., and D. C. Proctor, Peoria, Ill. Stove. (Design).	Nov. 4, 1873			4	478
	Culver, C. P., et al. (See Teed, T., assignor.)					
135, 207	Culver, J. C., assignor of one-fourth interest to J. G. Pettie, Cleveland, Ohio. Rotary engine.	Jan. 28, 1873	669	216	3	102
	Culver, J. D. (See Detrick & Culver.)					
145, 558	Culver, O. E., and L. E. Moseley, Eagle Bridge, N. Y. Wash-boiler. (Reissue.)	Dec. 16, 1873	477	156	4	648
	Cumberland, J. (See McClintock & Cumberland.)					
135, 267	Cummings, D. M., Newburyport, Mass. Bottle-stopper.	Jan. 28, 1873	727	232	3	106
144, 891	Cumming, D., jr., Jersey City, N. J. Device for wetting grindstones.	Nov. 25, 1873	631	215	4	563
143, 405	Cummings, G. B., Cambridge, Mass. Railway time-signal.	Oct. 7, 1873	6	2, 3	4	381
138, 135	Cummings, G. W., Franklin, Pa. Fire-place back.	Apr. 22, 1873	787	251	3	455
141, 261	Cummings, G. W., assignor of one-half interest to D. W. Hazeltine, Conneaut, Ohio. Rotary engine.	July 29, 1873	864	282	4	114
140, 118	Cummings, J., West Charleston, Vt. Mill-pick.	June 24, 1873	642	202	3	692
137, 183	Cummings, P. D., Portland, Me., assignor to The Shoe Machinery Manufacturing Company, Conn. Machine for skiving and splitting leather.	Mar. 25, 1873	756	250	3	335
145, 488	Cummings, P. D., Portland, Me. Grinding-machine.	Dec. 16, 1873	408	134	4	642
139, 457	Cummings, P. D., M. Smith, and J. C. Jordan, said Cummings assignor to said Smith & Jordan, Portland, Me. Machine for cutting matches.	June 3, 1873	11	3, 4	3	610
144, 388	Cummings, P. M., Lyons, Iowa. Head-block.	Nov. 11, 1873	191	65	4	506
	Cunningham, J. (See Tester, A., assignor.)					
137, 659	Cunningham, D., Dundee, Scotland. Construction of breakwaters.	Apr. 8, 1873	346	107	3	397
138, 008	Cunningham, J., Rochester, N. Y. Carriage-door.	Apr. 22, 1873	675	214	3	446
	Cunningham, J. L. (See Walton & Cunningham.)					
139, 707	Cunningham, J. M., Mount Morris, Ill. Medical compound for liver diseases.	June 10, 1873	253		3	645
139, 946	Cunningham, R., Chicago, Ill. Device for making water-traps.	June 17, 1873	472	148	3	670
138, 485	Curlless, J. M., Cedar Rapids, Iowa. Excavator.	May 6, 1873	16	6	3	499
141, 205	Same. Baggage-check.	July 29, 1873	810	265	4	110
	Curran, E., et al. (See Scott & Hiltz, assignors.)					
146, 050	Curran, J. H., Rochester, N. Y., assignor of one-half interest to T. B. Johnson, Seneca Falls, N. Y. Sharpening-machine.	Dec. 30, 1873	935	301	4	707
	Curran, P., et al. (See Scott & Hiltz, assignors.)					
136, 216	Current, H. A., Clarksville, Tenn. Sawing-machine.	Feb. 25, 1873	765	247	3	225
137, 534	Currie, C. S., assignor of one-half interest to J. Dilley, Caldwell, Ohio. Railway-gate.	Apr. 8, 1873	241	74	3	388
	Currier, J. A. (See Rockwell, L. A., assignor.)					
5, 677	Curtis, A., Bastrop, La. Mode of constructing wells. (Reissue).	Dec. 9, 1873	390	128	4	629
139, 947	Same. same.	June 17, 1873	473	149	3	670
138, 318	Curtis, C. M., Philadelphia, Pa. Dental engine.	Apr. 29, 1873	983	309	3	478
5, 250	Curtis, D., Sun Prairie, Wis. Lining for wooden horse-collars, &c. (Reissue).	Jan. 21, 1873	646	210	3	87
5, 251	Curtis, D., Sun Prairie, Wis., assignor of one-half interest to H. Gilman and G. H. Richards. Lining for horse-collar cap and harness. (Reissue).	Jan. 21, 1873	647	210	3	87
5, 443	Same. same. (Reissue).	June 10, 1873	382	119	3	655
138, 383	Curtis, D., Sun Prairie, Wis. Horse-collar lining.	Apr. 29, 1873	1,034	326	3	483
142, 151	Curtis, E. T., Calumet, Mich. Arithmetical frame.	Aug. 26, 1873	695	229	4	218
	Curtis, F. (See Bingham, A., assignor.)					
	Same. (See Chase, C. M., assignor.)					
	Same. (See Smith, S. C., assignor.)					
	Same. (See Truesdell & Curtis.)					
144, 261	Curtis, G., Ogdensburg, N. Y. Water-wheel.	Nov. 4, 1873	78	25	4	484
	Curtis, H. G. (See Taylor, A., assignor.)					
	Curtis, J. (See Ash, A. D., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 514	Curtis, J., Cincinnati, Ohio. Carriage-spring	Nov. 11, 1873	293	99	4	514
136, 308	Curtis, M. A., San Francisco, Cal. Medical compound or ointment	Feb. 25, 1873	845		3	231
	Curtis, S. (See Zimmer, J., assignor.)					
143, 334	Curtis, S., New York, N. Y. Caster	Sept. 30, 1873	886	303	4	363
	Curtiss, E., et al. (See Capewell, G. J., assignor.)					
	Curtiss, E. P. (See Shipherd & Curtis.)					
143, 749	Curtiss, G. G., Rochester, N. Y. Washing-machine	Oct. 21, 1873	347	116	4	426
	Curtiss, J. S. (See Curtiss, T. A. & J. S.)					
140, 480	Curtiss, M. S., Bradford, Ill. Gang-plow	July 1, 1873	115	39	4	18
145, 096	Curtiss, T. A., Springfield, Mass., and J. S. Curtiss, Hartford, Conn. Liquid-meter	Dec. 2, 1873	52	17	4	589
	Curtiss, T. M., et al. (See Briggs, L. W., assignor.)					
146, 051	Curtner, I., assignor to C. A. Gump and E. S. Forgy, Dayton, Ohio. Stone-tool	Dec. 30, 1873	936	302	4	708
140, 250	Cusenbary, J. D., and J. A. Mars, San Francisco, Cal. Ore-stamp feeder	June 24, 1873	750	237	3	701
144, 660	Cushing, C. H., Tidioute, Pa. Apparatus for burning hydrocarbons	Nov. 18, 1873	428	144	4	536
138, 077	Cushing, E. G., Oswego, N. Y. Combined stop-cock, check-valve, and blow-off	Apr. 22, 1873	742	235	3	451
	Cushman, A. R. (See Wageoner, G. W., assignor.)					
141, 332	Cushman, C. S., assignor to N. D. Stoops, Philadelphia, Pa. Sewing-machine	July 29, 1873	928	303	4	120
142, 442	Same	Sept. 2, 1873	108	35	4	251
	Cushman, H. S. (See Wells & Cushman.)					
138, 618	Custer, G., Monroe, Mich. Horseshoe-calk	May 6, 1873	131	43	3	508
	Cutcheon, S. M., et al. (See McCoy, E., assignor.)					
143, 335	Cutcliffe, E., East Bethany, N. Y. Subsoil-attachment for plows	Sept. 30, 1873	887	303	4	363
	Cuthbert, J. O., et al. (See Bisbing & McCune, assignors.)					
136, 903	Cuthbert, W. M., Oil City, Pa. Sewing-machine table	Mar. 18, 1873	499	165	3	303
136, 974	Cutler, S., assignor to self and H. McConnell, Cincinnati, Ohio. Door-spring	Mar. 18, 1873	557	185	3	308
143, 336	Cutler, T. O., Jersey City, N. J. Quartz-mill	Sept. 30, 1873	888	304	4	363
5, 449	Cutler, W. H., Buffalo, N. Y. Inhaler	June 17, 1873	617	194	3	682
135, 411	Same	Feb. 4, 1873	17	5	3	129
136, 973	Same	Mar. 18, 1873	557	185	3	308
144, 661	Cutter, E., Woburn, Mass. Hypodermic syringe	Nov. 18, 1873	429	145	4	536
135, 782	Cutter, J. D., Brooklyn, N. Y. Case for exhibiting spools	Feb. 11, 1873	362	117	3	168
136, 367	Cutting, L., San Francisco, Cal. Soldering-tool	Mar. 4, 1873	12	5	3	246
145, 156	Same	Dec. 2, 1873	108	36	4	594
139, 372	Cyrani, A., and C. Reinhardt, Brooklyn, N. Y. Druggist's scales	May 27, 1873	828	265	3	596
140, 119	Czarniecki, E., Allegheny, Pa. Nut-lock	June 24, 1873	643	202	3	692
139, 876	Daboll, A. P., New London, Conn. Bit-stock	June 17, 1873	413	129	3	665
143, 396	Daddow, S. H., Saint Clair, Pa. Squib for blasting	Sept. 30, 1873	945	320	4	367
143, 406	Daffin, T., assignor to self and W. Baldwin, Philadelphia, Pa. Die for forging hammers	Oct. 7, 1873	9	3	4	381
140, 683	Daguir, J., Cincinnati, Ohio. Mechanical movement	July 8, 1873	305	103	4	44
144, 960	Dahl, A. K., Fox Lake, Wis. Plow	Nov. 25, 1873	687	232	4	568
139, 497	Dahmer, P. G., New York, N. Y. Washing-machine	June 3, 1873	49	15	3	613
	Dainty, A. J., administratrix. (See Howard & Dainty.)					
	Dainty, J. (See Howard & Dainty.)					
134, 788	Dake, D. W., Chicago, Ill. Butter-worker	Jan. 14, 1873	275	90	3	42
144, 662	Dake, D. W., Beloit, Wis. Butter-worker	Nov. 18, 1873	429	145	4	536
145, 338	Same	Dec. 9, 1873	274	92	4	620
136, 217	Dake, H. M., Nunda, N. Y. Portable fence	Feb. 25, 1873	766	247	3	225
135, 696	Dakin, A. C., Clinton, Mass. Flower-stand	Feb. 11, 1873	293	92	3	163
	Dale, H. (See Stein, H., assignor.)					
139, 120	Dale, J. P., Battle Creek, assignor to self and D. E. Doane, Ann Arbor, Mich. Milk-safe	May 20, 1873	596	187	3	569
5, 684	Dale, W., New York, N. Y., assignor of two-thirds interest to W. S. O'Brien. Illuminating vault-cover	Dec. 16, 1873	609	199	4	659
136, 708	Dale, W. P., Agricultural College, Pa. Cultivator	Mar. 11, 1873	324	107	3	280
146, 052	Dallemagne, A. J., and L. Triboulet, Paris, France. Photographic monocular glasses	Dec. 30, 1873	937	302	4	708
	Dalton, P. W. (See McNeil & Dalton.)					
136, 420	Dalton, P. W., Jersey City, N. J. Apparatus for rendering tallow, &c	Mar. 4, 1873	57	20	3	250
140, 481	Daly, W. F., assignor of one-half interest to E. D. Olin, Peru, Ind. Device for locking a series of drawers	July 1, 1873	116	40	4	18
140, 210	Same	Aug. 26, 1873	745	245	4	222
139, 877	Dame, A. A., Titusville, Pa. Flange-unions	June 17, 1873	414	129	3	665
139, 878	Same	June 17, 1873	415	129	3	665
135, 697	Dame, L., Newburyport, Mass. Device for converting circular into reciprocating motion	Feb. 11, 1873	293	93	3	163
	Damon, Thomas and Lewis. (See Hall, I., assignor.)					
139, 298	Danforth, D. A., and F. M. Winchester, Elkhart, Ind. Card-rack	May 27, 1873	774	245	3	591
	Danforth, H. S. (See Murphy, T. G., assignor.)					
139, 047	Danforth, J. I., Newburyport, Mass. Stove-polish	May 20, 1873	523	.....	3	563
139, 879	Same	June 17, 1873	416	.....	3	665
144, 322	Same	Nov. 4, 1873	124	41	4	488
141, 123	Daniels, D., Park's Corners, Ill. Last-block holder	July 22, 1873	716	238	4	95
137, 295	Daniels, D. G., Pittsburgh, Pa. Car-spring	Apr. 1, 1873	14	5	3	358
	Daniels, J. (See Lathrop, B. L., assignor.)					
141, 206	Daniels, J. F., Boston, Mass., and J. H. Hubbard, Stanstead, Canada. Wood-grinder	July 29, 1873	810	265	4	110
135, 633	Daniels, L. S., Foxborough, Mass. Steam-radiator	Feb. 11, 1873	235	74	3	158
136, 904	Daniels, P., Jackson City, Mich. Artificial stone	Mar. 18, 1873	500	.....	3	303
	Daniels, R., Woodstock, Vt. Straw-cutter	June 1, 1873	.....	.....	3	662
137, 763	Daniels, W. H., Bryan, Ohio. Scythe-rifle	Apr. 15, 1873	452	141	3	418
138, 136	Same	Apr. 22, 1873	787	251	3	455
	Danks, F., Cincinnati, Ohio. Puddlers' ball-squeezer	July 29, 1873	811	{ 265 } { 266 }	{ 4 } { 3 }	{ 110 } { 250 }
136, 421	Danks, S., Cincinnati, Ohio. Lining rotary puddling-furnaces	Mar. 4, 1873	58	.....	3	250
142, 152	Same	Aug. 26, 1873	696	{ 229 } { 230 }	{ 4 } { 4 }	{ 218 } { 400 }
	Danner, J., Canton, Ohio. Sleeping-car	Oct. 18, 1873	.....	.....	4	400
136, 905	Same	Mar. 18, 1873	501	166	3	304
143, 898	Same	Oct. 21, 1873	466	156	4	436
140, 251	Darby, H. C., Wyandotte, Kans. Locomotive fire-box crown	June 24, 1873	750	237	3	701
141, 633	Darby, T., Duncan, Ill. Hog-trap	Aug. 12, 1873	212	67	4	160
134, 737	Darby, J. F., Nebraska City, Nebr. Scaffold	Jan. 14, 1873	232	74	3	39
	Darling, A. B. (See Massey & Darling.)					
	Same					
	Darling, E. N. (See Reigart, J. F., assignor.)					
137, 599	Darling, F. A., Fayetteville, N. Y. Addressing-machine	Apr. 8, 1873	296	91	3	392
144, 389	Darling, J., Whistler, Ala. Railway-car truck	Nov. 11, 1873	192	66	4	506
145, 727	Darling, J., Cincinnati, Ohio. Hoisting-machine	Dec. 23, 1873	632	207	4	673

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138, 009	Darling, S., Providence, R. I. Window.....	Apr. 22, 1873	676	214	3	446
139, 551	Darnstaedt, C., Meriden, Conn. Towel-rack and boot-jack combined.....	June 3, 1873	92	31	3	616
134, 523	Darozir, L., assignor to self and J. Morissette, Worcester, Mass. Match-safe.....	Jan. 7, 1873	19	6	3	9
	Darragh, C., et al. (See Pritchard, T., assignor.)					
136, 040	Darrell, A. M., assignor of one-half interest to T. Norfleet, Washington, D. C. Trunk-hinge.....		599	197	3	200
138, 010	Darrow, F. E., and O. E. Wait, Rockfort, Mass. Heel-stiffening for boots and shoes.....	Apr. 22, 1873	677	214	3	446
135, 732	Da Silva, E. A. C., New York, N. Y. Animal-trap.....	Feb. 11, 1873	321	102	3	165
142, 840	Datichy, J. P. F., Brooklyn, N. Y. Apparatus for cleaning cess-pools, sinks, &c.....	Sept. 16, 1873	466	158	4	302
139, 552	Daugherty, I., Rocky Station, Va. Fly-protector.....	June 3, 1873	92	31	3	616
142, 153	Davenport, F. S., Jerseyville, Ill. Diamond mill-stone dressing-machine.....	Aug. 26, 1873	698	230	4	218
143, 965	Davenport, S. J., and J. Ward, Albany, N. Y. Pavement.....	Oct. 28, 1873	550	182	4	453
	Davenport, W. R. (See Elliott, Harrington & Davenport.)					
	Davidson, J. H. (See Campbell, C., assignor.)					
138, 866	Davidson, M. T., Brooklyn, N. Y. Sectional steam-generator.....	May 13, 1873	365	113	3	537
145, 157	Same..... Trap for steam-pipes.....	Dec. 2, 1873	109	36	4	594
138, 137	Davidson, T. L., and H. Winningham, Charleston, S. C. Saw-sharpening machine.....	Apr. 22, 1873	788	252	3	455
137, 751	Davidson, T. P., and A. Parvis, Liberty, Ind. Hay-loader.....	Apr. 8, 1873	436	134	3	404
145, 158	Davie, J. P., Galveston County, and A. Morgan, Cedar Bayou, Tex. Windmill.....	Dec. 2, 1873	110	26	4	594
141, 701	Davies, E. H., Pittsburgh, Pa. Rolling-mill for sheet-metal.....	Aug. 12, 1873	268	87	4	165
	Davies, H. (See Mears & Davies.)					
135, 698	Davies, H., Newport, Ky. Safety-valve.....	Feb. 11, 1873	294	93	3	163
6, 963	Davies, H. J., Brooklyn, N. Y. Clock-pendulum..... (Design).....	Oct. 21, 1873			4	425
137, 184	Davies, H. J., assignor to J. G. Bennett and A. H. Smith, Brooklyn, N. Y. Machine for printing and embossing skirts.....	Mar. 25, 1873	757	250	3	335
143, 811	Davies, J., Knoxville, Tenn. Apparatus for puddling iron.....	Oct. 21, 1873	401	133	4	431
135, 783	Davies, T. A., New York, N. Y. Signal-lantern.....	Feb. 11, 1873	363	117	3	168
136, 218	Same..... Lantern.....	Feb. 25, 1873	767	248	3	225
136, 709	Davies, T. A., New York, N. Y. Railway snow-plow.....	Mar. 11, 1873	325	107	3	280
135, 784	Davies, W. B., New York, N. Y. Life-raft.....	Feb. 11, 1873	363	117	3	168
139, 299	Davis, A., Lowell, Mass. Dovetailing-machine.....	May 27, 1873	775	246	3	591
	Davis, A. B., Philadelphia, Pa. Car-spring..... (Extension).....	Feb. 15, 1873			3	156
22, 941	Same..... same..... (Disclaimer filed).....	Feb. 10, 1873			3	156
22, 941	Same..... same.....	Feb. 15, 1873			3	156
	Davis, A. D. (See Eaton, I. F., assignor.)					
141, 495	Davis, A. J., Hartford, Mich. Fly-trap.....	Aug. 5, 1873	78	24	4	141
	Davis, B. C., Binghamton, N. Y. Hand-machine for wiring blind-rods..... (Extension).....	Oct. 11, 1873			4	379
143, 125	Davis, B. F., Hearne, Tex. Bridge.....	Sept. 23, 1873	706	242	4	332
136, 906	Davis, B. W., Fort Madison, Iowa. Nut-lock.....	Mar. 18, 1873	502	166	3	304
	Davis, C. E., et al. (See Bucklin, E., jr., assignor.)					
5, 252	Davis, D. P., Jersey City, N. J., assignor of one-half interest to G. J. Hunter. Recording steam-gauge..... (Reissue).....	Jan. 21, 1873	648	210	3	87
	Davis, E. (See Cole & Davis.)					
	Same..... (See Porter & Davis.)					
139, 300	Davis, E., Millerton, N. Y. Blast-furnace alarm-apparatus.....	May 27, 1873	776	246	3	591
141, 429	Davis, E., assignor of half interest to J. P. Arnott, Hanover, Ind. Wash-boiler attachment.....	Aug. 5, 1873	18	5	4	136
5, 347	Davis, E. K., deceased, by S. C. Davis, administratrix, New York, N. Y. Loom for weaving pile-fabrics..... (Reissue).....	Apr. 8, 1873	436	{ 134 } { 135 }	{ 3 }	404
	Davis, F. A. (See Davis, V., assignor.)					
142, 994	Davis, F. M., La Cygne, Kans. Sash-holder.....	Sept. 23, 1873	601	204	4	323
	Davis, G. G., et al. (See Davis, H. D., assignor.)					
	Same..... (See McGovern, P., assignor.)					
	Same..... (See Stone, J. M., assignor.)					
143, 967	Davis, G. H., Boston, Mass. Upright piano-forte.....	Oct. 28, 1873	552	183	4	453
	Davis, G. L., et al. (See Davis, H. D., assignor.)					
	Same..... (See McGovern, P., assignor.)					
	Same..... (See Stone, J. M., assignor.)					
136, 219	Davis, G. R., Nobleville, Ohio. Washing-machine.....	Feb. 25, 1873	767	258	3	225
142, 211	Davis, G. R., Kingston, Mich. Thill-coupling.....	Aug. 26, 1873	746	245	4	222
143, 966	Davis, H., Berlin, Wis. Spring-equalizer.....	Oct. 28, 1873	551	183	4	453
141, 262	Davis, H. D., assignor to G. L. Davis, J. A. Wiley, J. M. Stone, G. G. Davis, J. H. Stone, and J. H. Davis, North Andover, Mass. Looms.....	July 29, 1873	865	{ 283 } { 284 }	{ 4 }	114
	Davis, H. E., et al. (See Cleaveland, G. D., assignor.)					
137, 660	Davis, H. S., Camden, N. J. Interfering-attachment for horseshoes.....	Apr. 8, 1873	349	108	3	397
	Davis, J. (See Evered, J., assignor.)					
5, 350	Davis, J., Florida, Mass. Wash-boiler..... (Reissue).....	Apr. 15, 1873	648	204	3	434
137, 296	Same..... Steam washer.....	Apr. 1, 1873	15	5	3	358
139, 880	Davis, J., Saint Paul, Minn. Pipe-stem.....	June 17, 1873	417	130	3	665
142, 328	Davis, J., Chicago, Ill. Mop-head.....	Sept. 2, 1873	6	2	4	242
138, 138	Davis, J., and J. Armstrong, Pittston, Pa. Process for tanning.....	Apr. 22, 1873	789		3	455
138, 996	Davis, J. A., Brattleborough, Vt. Sewing-machine.....	May 20, 1873	484	153	3	560
	Davis, J. H., et al. (See Davis, H. D., assignor.)					
	Same..... (See McGovern, P., assignor.)					
	Davis, J. H. (See Snow & Davis)					
	Davis, J. H., et al. (See Stone, J. M., assignor.)					
	Davis, J. H. (See Wingo, B. W., assignor.)					
141, 857	Davis, J. H., Livingston County, Mo. Screw-driver.....	Aug. 19, 1873	414	135	4	186
139, 122	Davis, J. S., Toledo, Ohio. Harvester.....	May 20, 1873	597	188	3	569
145, 728	Davis, J. S., Ithaca, N. Y. Corn-planter.....	Dec. 23, 1873	633	207	4	673
	Davis, J. W. (See Lee & Davis.)					
139, 121	Davis, J. W., Reno, Nev., assignor to self and L. Strauss & Co., San Francisco, Cal. Fastening pocket-openings.....	May 20, 1873	597	188	3	569
143, 225	Davis, L. H., West Chester, Pa. Washing-machine.....	Sept. 30, 1873	793	273	4	355
	Davis, N. (See Lantis & Davis.)					
	Same..... (See Paquette, N., assignor.)					
	Davis, N. N. (See Windle, G., assignor.)					
	Davis, R. (See Lansdowne, S., assignor.)					
141, 496	Davis, R., assignor to self and P. C. Kirk, Lawrence, Mass. Loom-picking stick-check.....	Aug. 5, 1873	78	25	4	141
	Davis, S. C., administratrix. (See Davis, E. K.)..... (Reissue).....					
	Davis Sewing-Machine Company. (See Wise, J., assignor.)					
137, 831	Davis, S. T., Millersville, Pa. Bee-hive.....	Apr. 15, 1873	510	159	3	423
135, 699	Davis, V., assignor to self and F. A. Davis, of Stoneham, Mass. Scraping instrument.....	Feb. 11, 1873	295	93	3	163
136, 975	Davis, W., Five Corners, N. Y. Railway snow-plow.....	Mar. 18, 1873	558	{ 185 } { 186 }	{ 3 }	308

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
142, 841	Davis, W. F., North Attleborough, Mass., assignor to J. T. Bacon & Co. Ornamental chain	Sept. 16, 1873	467	158	4	302
142, 329	Davis, W. H., assignor to J. Harlan, Lexington, Ind. Fruit and lard press	Sept. 2, 1873	7	3	4	242
136, 041	Davis, W. H., and R. V. De Guinon, said De Guinon assignor to said Davis, Jersey City, N. J. Steam-boiler	Feb. 18, 1873	599	197	3	200
142, 995	Davis, W. P. (See Mendham, W., assignor.) Davis, W. R., Union City, Pa. Cooper's croze and howel Davis Wheel and Palmer Fork Company. (See Palmer, N., assignor.)	Sept. 23, 1873	602	204	4	324
143, 675	Davison, D., New York, N. Y. Gas-retort	Oct. 14, 1873	253	85	4	409
143, 750	Davol, W. C., jr., Fall River, Mass. Steam fire-engine	Oct. 21, 1873	347	116	4	427
144, 068	Same.....Horse-stall for steam fire-engine-house	Oct. 28, 1873	643	211	4	461
144, 836	Daw, S., Corvallis, Oreg. Grain-separator	Nov. 25, 1873	586	200	4	559
136, 220	Dawdy, L. J., Hamburg, Iowa. Hand cultivator	Feb. 25, 1873	768	248	3	225
139, 048	Dawes, A., Hudson, assignor to H. E. Townsend, Boston, Mass. Eyeletting-machine	May 20, 1873	524	{ 165 166 }	{ 3 3 }	563
140, 995	Dawson, A. & H. T., Chiswick, England, assignors to G. W. Petter and T. D. Galpin, London, England. Method of etching plates for electrotyping	July 22, 1873	604	.....	4	86
140, 895	Dawson, G. F., Washington, D. C. Revolving seat Dawson, H. T. (See Dawson, A. & H. T.)	July 15, 1873	491	166	4	67
134, 524	Dawson, J., Staunton, Va. Apparatus for the production of spirits and the prevention of fraud upon the revenue	Jan. 7, 1873	20	7	3	9
140, 684	Dawson, R. H., Rockville, Conn. Flock-cleaning machine	July 8, 1873	305	103	4	44
135, 893	Day, A., Detroit, Mich. Button-hole cutter	Feb. 18, 1873	479	154	3	191
5, 230	Day, A. G., New York, N. Y. Process of manufacturing hard rubber. (Reissue)	Jan. 14, 1873	428	137	3	54
5, 231	Same.....Manufacture of hard flexible rubber. (Reissue)	Jan. 14, 1873	430	137	3	54
5, 232	Same.....Hard rubber. (Reissue)	Jan. 14, 1873	432	137	3	54
136, 309	Day, E. A., Oberlin, Ohio. Hose nozzle	Feb. 25, 1873	846	273	3	231
140, 120	Day, G. W., Haverhill, Mass. Corner-support for blind	June 24, 1873	644	202	3	692
145, 489	Same.....Hot-air furnace Day, H. B. (See Reed & Day.)	Dec. 16, 1873	409	134	4	642
144, 390	Day, H. H., New York, N. Y. Air-compressor	Nov. 11, 1873	193	66	4	506
134, 525	Day, J., New York, N. Y. Shoe and leather polisher	Jan. 7, 1873	20	7	3	9
140, 252	Day, J., Holley, N. Y. Supplemental attachment for cooking-stove	June 24, 1873	751	237	3	701
142, 443	Same.....Car-propeller	Sept. 2, 1873	109	35	4	251
143, 126	Same.....Soldering-furnace	Sept. 23, 1873	707	242	4	332
144, 961	Day, M., Charlestown, Mass. Cement sewer-bottom Day, S. W. (See Moore & Day.)	Nov. 25, 1873	688	232	4	568
143, 968	Daykin, J., and W. B. Case, Cleveland, Ohio. Chain-machine	Oct. 28, 1873	552	{ 183 184 }	{ 4 4 }	453
137, 832	Dayton, G. E., Baltimore, Md. Metallic sky-light	Apr. 15, 1873	511	160	3	423
141, 546	Dayton, H. G., Maysville, Ky. Disinfecting-powder	Aug. 5, 1873	119	.....	4	145
138, 011	Dayton, M. E., Syracuse, assignor of part interest to H. B. Tompkins and W. H. Wieting, New York, N. Y., and H. H. Branch, Hillsdale, Mich. Anti-friction journal Dayton Malleable-Iron Company. (See Loeb, P., assignor.)	Apr. 22, 1873	678	{ 214 215 }	{ 3 3 }	446
141, 922	Dayton, W. H., assignor to Excelsior Needle Company, Wolcottville, Conn. Machine for feeding wire to hammer-dies	Aug. 19, 1873	477	157	4	191
139, 239	Deacon, H., Widnes, England. Manufacture of bleaching-liquors	May 27, 1873	721	.....	3	587
141, 333	Deacon, H., Lancaster County, England. Manufacture of chlorine Deacon, J. (See Deacon, S. and J.)	July 29, 1873	929	.....	4	120
145, 159	Deacon, S. and J., Lawrence, Mass. Paper-pulp washing-machine	Dec. 2, 1873	112	37	4	594
136, 043	Dean, A. B., and T. C. Coleman, Louisville, Ky. Railway-rail	Feb. 18, 1873	601	198	3	200
144, 892	Dean, A. H., Bridgeport, Conn. Automatic-toy	Nov. 25, 1873	632	215	4	563
136, 042	Dean, E. K., Bangor, Me. Stove-pipe damper	Feb. 18, 1873	600	197	3	200
134, 647	Dean, G. W., New York, N. Y. Ash-sifting shovel	Jan. 7, 1873	140	45	3	18
143, 444	Dean, G. W., Stamford, Conn. Concrete pavement	Sept. 2, 1873	110	35	4	251
139, 553	Dean, J., New Baltimore, N. Y. Flour-mill	June 3, 1873	93	32	3	616
145, 490	Dean, L. H., Tecumseh, Mich. Motor	Dec. 16, 1873	410	135	4	642
5, 490	Dean, N. C., assignor of one-half interest to S. S. Bliss, Union Springs, N. Y. Clip-plate for carriage-springs. (Reissue)	July 15, 1873	593	199	4	76
134, 859	Same.....Clip-plate for carriage-springs	Jan. 14, 1873	336	108	3	47
141, 702	Dean, O. A., Bethel, Vt. Circular-saw guard Dean, Smith, & Co., et al. (See Hoyt, F. A., assignor.)	Aug. 12, 1873	269	87	4	165
139, 374	Deane, C. W., Philadelphia, Pa. Tube-expander Deane, E. L. (See Munger, F. M., assignor.)	May 27, 1873	830	266	3	596
139, 373	Deane, W. P., Canton, Mass. Shears for cutting paper	May 27, 1873	829	266	3	596
144, 069	Dearborn, C. A., New Bedford, Mass. Carriage top	Oct. 28, 1873	644	212	4	461
145, 054	Deardorff, I. N., Canal Dover, Ohio. Stove for smoke-houses	Dec. 2, 1873	12	4	4	587
135, 894	Dearing, O. A., San Francisco, Cal. Printer's lead-rack	Feb. 18, 1873	479	155	3	191
144, 447	Deasey, J., Fall River, Mass. Beer and ale faucet	Nov. 11, 1873	239	80	4	509
139, 123	Deavs, C., assignor to Archer and Pancoast Manufacturing Company, New York, N. Y. Center-slide drop-light	May 20, 1873	600	188	3	569
141, 634	Same.....Smoke-bell for gasaliers	Aug. 12, 1873	213	67	4	160
145, 632	Same.....Center drop-light	Dec. 16, 1873	538	176	4	653
135, 092	De Barry, J. J., Chicago, Ill. Key-check	Jan. 21, 1873	549	179	3	79
143, 440	De Boucherville, G. B., Quebec, Canada. Propulsion of vessels	Oct. 7, 1873	38	13	4	384
141, 263	De Castro, D., and R. Burton, assignors to the Imperial Meter Company, London, England. Gas-meter	July 29, 1873	869	284	4	114
141, 858	Decker, C. D., Bonus, Ill. Straw-conveyor for thrashing-machines	Aug. 19, 1873	415	135	4	186
141, 703	Decker, C. E., Chicago, Ill. Pneumatic-oiler Decker, D., et al. (See Kreter, R., assignor.)	Aug. 12, 1873	270	88	4	165
141, 497	Decker, E. B., Carrollton, Ill. Farm-gate	Aug. 5, 1873	79	25	4	141
142, 996	Decker, H., Cohecton, N. Y. Railway-rail joint Decker, J. J., et al. (See Kreter, R., assignor.)	Sept. 23, 1873	602	204	4	324
137, 185	Decker, L. H., Sauk Centre, Minn. Fanning-mill	Mar. 25, 1873	758	251	3	335
143, 127	Decker, L. H., Grove Lake, assignor of one-half interest to T. Bolles, Sauk Centre, Minn. Fanning-mill	Sept. 23, 1873	707	243	4	332
141, 635	Decker, P. H., and N. Lee, Chicago, Ill. Car-coupling	Aug. 12, 1873	214	67	4	160
145, 850	Déclat, G., Paris, France. Medical compound	Dec. 23, 1873	735	.....	4	681
143, 812	De Codezo, T., New York, N. Y. Smoke and spark conduits for railway trains De Coppet, F. V. (See Smith & De Coppet.)	Oct. 21, 1873	401	133	4	431
134, 592	Dederick, L., et al. (See Carter & Keith, assignors.)	Jan. 7, 1873	88	27	3	14
135, 700	Same.....Bale-tie	Feb. 11, 1873	295	93	3	163
142, 375	Same.....Brick-machine	Sept. 2, 1873	47	17	4	246

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142, 086	Dedrick, J. H., assignor to Medbery, Stevens & Co., Milwaukee, Wis. Middlings-purifier.	Aug. 26, 1873	640	{ 210 211 }	4	214
144, 323	Deeble, J., assignor of one-half interest to the Atwater Manufacturing Company, Plantsville, Conn. King-bolt for vehicles.	Nov. 4, 1873	126	42	4	488
145, 633	Deeble, J., assignor of three-fourths interest to the Atwater Manufacturing Company, Plantsville, Conn. Die for forming ox-shoes.	Dec. 16, 1873	539	177	4	653
140, 482	De Echeverria, J. (See Mégy, De Echeverria & Bazan.) Deeley, J., and J. S. Edge, jr., Yardley, England. Means of attaching the fore-end stock to gun-barrels.	July 1, 1873	117	40	4	18
143, 226	Deere & Co. (See Nason, C. O., assignor.) Deering, M., assignor to Sweet, Barnes & Co., Syracuse, N. Y. Machine for forming spring-keys.	Sept. 30, 1873	794	274	4	355
141, 923	Deey, E. M., New York, N. Y. Fluting-machine.	Aug. 19, 1873	478	158	4	191
139, 375	De Forest, D. W., assignor of one-half interest to W. M. Lewis, Petersburg, Va. Machine for rolling tobacco.	May 27, 1873	830	266	3	596
144, 838	De Forest, D. W., Petersburg, Va., assignor of two-thirds interest to S. S. and F. P. Norton, Brooklyn, N. Y. Collar and cuff dryer.	Nov. 25, 1873	588	201	4	559
5, 334	De Forest, T. B., and T. S. Gilbert, Birmingham, Conn., assignors by mesne assignment to A. K. Young. Hoop-skirt.	Mar. 25, 1873	844	277	3	342
134, 648	De Good, J. L., Jefferson, Pa. Car-couplings.	Jan. 7, 1873	140	45	3	18
136, 820	De Groat, C. H. (See Holmes, N. L., assignor.) De Groodt, L., et al. (See De Groodt, M., assignor.) De Groodt, M., Eaton, N. Y., assignor to T. S. and L. De Groodt, Pratt's Hollow, N. Y. Pruning-shears.	Mar. 18, 1873	432	143	3	298
143, 755	De Groodt, T. S., et al. (See De Groodt, M., assignor.) De Grouilliers, H., Berlin, Germany. Manufacture of alkaline carbonates.	Oct. 21, 1873	352	.....	4	427
140, 815	De Guinon, R. V. (See Davis & De Guinon.) De Guinon, R. V., Jersey City, N. J. Supplying oil to street-lamps.	July 15, 1873	425	144	4	62
137, 297	De Haven, I. N. (See Thorne & De Haven.) Deibert, J. M. (See Royal, Lentz & Deibert.) Deitzler, M., assignor of one-half interest to H. Adams, Ashland, Pa. Case for laces, ribbons, &c.	Apr. 1, 1873	17	5	3	358
5, 680	De Lalande, F. (See Schutzenberger & De Lalande.)					
5, 681	Delamater, C. A., et al. (See Ericsson, J., assignor.)					
144, 746	Delamater, C. H. (See Miller, J., assignor.) Delaney, M., New York, N. Y. Mold for rubber billiard-cushions.	Dec. 9, 1873	393	129	4	629
144, 837	Same. Billiard-cushion.	Dec. 9, 1873	395	129	4	629
140, 896	De Lano, A. D., Goodrich, Mich. Sleigh.	Nov. 18, 1873	499	169	4	542
135, 972	Delano, C. W. H., Cedar Rapids, Iowa. Grape and flower picker.	Nov. 25, 1873	587	200	4	559
140, 253	Delbridge, C. J., Rochester, N. Y. Cigar-machine.	July 15, 1873	491	166	4	68
141, 704	De Leide, R., Brooklyn, N. Y. Propulsion of cars.	Feb. 18, 1873	539	179	3	196
134, 649	Dé Leon, M. J., Baltimore, Md. Cooking-apparatus.	June 24, 1873	752	238	3	701
6, 770	Delessert, H. E., Paris, France. Carriage.	Aug. 12, 1873	271	88	4	165
5, 635	Delfer, F. L., Burlington, Iowa. Nuts.	Jan. 7, 1873	141	45	3	18
137, 063	Delker, G., and C. L. Blondin, Henderson, Ky. Phaeton body.	July 8, 1873	.....	.....	4	36
135, 895	Delkescamp, A., Brooklyn, N. Y., assignor to J. J. Nichols, New York, N. Y. Die for cutting out ornamental forms of paper.	Oct. 28, 1873	745	248	4	469
142, 005	Same. Die for cutting out ornamental forms of paper.	Mar. 25, 1873	648	215	3	327
143, 676	Delonest, A. E., assignor of one-half interest to Poh & Raichle, Buffalo, N. Y. Stop-cock and regulator for gas-burners.	Feb. 18, 1873	480	155	3	191
139, 240	Delsarte, A. C. L., Paris, France. Pendulum level.	Aug. 19, 1873	545	180	4	196
144, 663	Demailly, G., Brussels, Belgium. System of purifying water chemically and mechanically.	Oct. 14, 1873	254	85	4	410
142, 842	Demarest, J., Belleville, N. J. Tool for cutting leather.	May 27, 1873	722	227	3	587
136, 045	Demarest, J., assignor to self and J. L. Mott, Mott Haven, N. Y. Pipe-joint.	Nov. 18, 1873	430	145	4	536
137, 128	Demartini, F., and J. Chertizza, New York, N. Y. Vessel for transporting grain in bulk.	Sept. 16, 1873	468	158	4	302
142, 087	Demers, J. (See Ruel, L., assignor.) De Mestre, A., Bordeaux, France. Bottle-stopper.	Feb. 18, 1873	602	198	3	201
140, 121	Deming, H. C. (See Weaver, T., assignor.) Deming, J. (See Faucett, Silver & Deming.) Same. (See Silver, A. R., assignor.)					
139, 001	Deming, J. W., Paris, Me. Wash-boiler.	May 27, 1873	777	246	3	591
142, 212	De Mott, L., Cannonsville, N. Y. Horseshoe.	Mar. 25, 1873	707	234	3	332
141, 769	Dempster, R. (See Allison, O. W., assignor.) Denby, T. R., Carlinville, Ill. Land-pulverizer.	Apr. 15, 1873	453	141	3	418
142, 212	Denham, T. M., New Bedford, Mass. Shirt-front.	Aug. 26, 1873	746	246	4	222
142, 087	Denio, A. O., Wilmington, Del. Locomotive ash-pan cleaner.	Aug. 12, 1873	328	108	4	170
139, 881	Denison, E. B. (See Brown & Denison.) Denison, T. H., et al. (See Ernst, J. G., assignor.)					
144, 962	Denlinger, A. R., Gordonville, Pa. Fumigator for bee-hives.	June 17, 1873	470	130	3	665
142, 087	Same. Fumigator.	Nov. 25, 1873	688	232	4	568
135, 412	Dennen, J., Chicago, Ill. Brick.	Aug. 26, 1873	643	.....	4	214
140, 121	Denney, S. L., Gap, Pa. Turbine water-wheel bucket.	Feb. 4, 1873	17	5	3	129
142, 006	Denney, W. H., assignor of one-third interest to J. F. King. Machine for slotting links for locomotives.	June 24, 1873	644	202	3	692
138, 795	Dennis, J., and C. H. Weston, Lowell, Mass. Steam cloth-press.	Aug. 19, 1873	546	180	4	197
136, 221	Dennis, S. J., Boston, Mass. Carriage axle-iron.	May 13, 1873	304	94	3	532
142, 212	Dennison, D. B., et al. (See Grotz, C., assignor.) Dennison, D. D., Ottumwa, Iowa. Cylinder-cock.	Feb. 25, 1873	768	248	3	225
136, 492	De Pauville, A. N. (See Roswag & De Pauville.) Depledge, C. (See Wilcox & Depledge.)					
142, 213	Derden, J. P., Bastrop, La. Cotton-press.	Mar. 4, 1873	59	21	3	250
139, 049	Derham, P. W., New York, N. Y. Paper-file.	Aug. 26, 1873	747	246	4	222
139, 050	Derrom, A., Paterson, N. J. Stucco cornice.	May 20, 1873	526	166	3	564
135, 093	Same. Mold for forming building-blocks.	May 20, 1873	527	166	3	564
144, 747	De Sha, J. (See Dorsey, D. B., assignor.) Deshler, J. G. (See Andrews, E. B., assignor.)					
139, 708	De Silva, M. B., and G. T. Benjamin, Cleveland, Ohio. Trace-buckle.	Jan. 21, 1873	550	179	3	79
144, 262	Desper, H. A., Worcester, Mass. Fluid-meter.	Nov. 18, 1873	499	170	4	542
139, 708	Desper, J. (See Hastings & Desper.) Desper, J., Barre, Mass. Die for pressing hats.	June 10, 1873	253	79	3	645
144, 262	Same. Die for pressing hats.	Nov. 4, 1873	79	26	4	484
139, 554	D'Este, J. (See Tobey, J. F., assignor.) Detrick, W., and J. D. Culver, said Culver assignor to said Detrick, Greencastle, Ind. Sawing-machine.	June 3, 1873	93	32	3	616

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Detroit Stove-Works. (See Carter, J. V. B., assignor) (Design.)					
144, 748	De Valin, W. H., Sacramento, Cal. Pavement.....	Nov. 18, 1873	500	170	4	542
144, 749	De Valin, W. H., San Rafael, Cal. Treating bricks for pavements.....	Nov. 18, 1873	501	.....	4	542
140, 254	De Vaney, G., jr., Darbyville, Ohio. Combined corn-planter and cultivator.....	June 24, 1873	753	238	3	701
137, 601	Develley, L. H., South Boston, Mass. Machinery for embossing spool-heads.....	Apr. 8, 1873	297	92	3	393
140, 685	Devendorf, A. L., Galesburgh, Ill. Cock.....	July 8, 1873	306	103	4	44
135, 094	Deverell, S. R., Mount Gambier, South Australia. Means of operating ships' pumps.....	Jan. 21, 1873	550	179	3	80
136, 310	Devlan, P. S., Jersey City, N. J., assignor to self and Walton Brothers, Newark, N. J. Car and window washer.....	Feb. 25, 1873	846	273	3	231
143, 407	Devlan, P. S., Jersey City, N. J., assignor of one-third interest to C. Barnum, Brooklyn, N. Y. Railway-tie.....	Oct. 7, 1873	9	3	4	381
139, 882	Devlin, J., Brooklyn, N. Y. Apparatus for forcing beer and other liquids from barrels.....	June 17, 1873	418	130	3	665
	Devoe, B. G. (See Rogers & Devoe.)					
	Devoe, B. G., et al. (See Rogers, T., assignor.)					
140, 897	Devoe, B. G., Fredericktown, Ohio. Iron fence.....	July 15, 1873	493	166	4	68
140, 898	Devol, J. L., and J. M. Okey, Parkersburgh, W. Va. Sash-holder.....	July 15, 1873	494	167	4	68
140, 816	De Vore, A. B., Talkington Township, Ill. Hog-trap.....	July 15, 1873	426	144	4	62
136, 141	Dew, J. M. A., Chicago, Ill. Knob-latch.....	Feb. 25, 1873	709	228	3	220
143, 969	De Waru, L. E., Baltimore, Md. Guide for shoe-sewing.....	Oct. 28, 1873	554	184	4	453
137, 348	Deweese, A., Oak Mills, Kans. Bee-hive.....	Apr. 1, 1873	66	21	3	362
136, 140	Dewell, J. V., assignor to self, J. Jenkins, and P. C. Provost, Brooklyn, N. Y. Bucket.....	Feb. 25, 1873	708	228	3	220
	Dewey, H. M. (See Dewey, M. J. & J. T., assignors.)					
137, 535	Dewey, H. S., assignor of one-half interest to M. W. Wolf, Chicago, Ill. Railway-switch.....	Apr. 8, 1873	241	74	3	388
139, 051	Dewey, J. J., Quechee, Vt. Spinning-mule.....	May 20, 1873	527	166	3	564
145, 053	Same..... Shaft for vehicles.....	Dec. 2, 1873	13	5	4	587
	Dewey, J. T. (See Dewey, M. J. & J. T.)					
142, 088	Dewey, M. J. & J. T., assignors of one-third interest to H. M. Dewey, West Troy, N. Y. Apparatus for renovating velvet, &c.....	Aug. 26, 1873	643	211	4	214
135, 095	De Witt, E., Belvidere, N. J. Stove-grate.....	Jan. 21, 1873	551	180	3	80
135, 096	Same..... same.....	Jan. 21, 1873	552	180	3	80
140, 122	De Witt, G., Belleville, and J. Fairman, New York, N. Y. Building-block.....	June 24, 1873	645	203	3	692
143, 227	De Witt, J. H., Orange, N. Y. Machine for painting wire cloth.....	Sept. 30, 1873	795	274	4	355
	Dews, J. (See Carmichel, A., assignor.)					
140, 123	Dexter, B. E., Gowanda, N. Y. Mode of attaching sleigh-bells to harness.....	June 24, 1873	645	203	3	692
141, 124	Dexter, C. H., Baltimore, Md. Can for oysters.....	July 22, 1873	717	239	4	95
136, 907	Dexter, S. B., Mason City, Iowa. Combined adjustable pincher and grappling-tool.....	Mar. 18, 1873	503	166	3	304
137, 129	Same..... Combined wrench and grappling-tool.....	Mar. 25, 1873	707	235	3	332
137, 130	Same..... Grapple.....	Mar. 25, 1873	708	235	3	332
138, 319	Dexter, H., Chicago, Ill. Washing-machine.....	Apr. 29, 1873	985	{ 309 } 310	3	478
145, 991	De Zeng, H. L., Geneva, N. Y. Railway-tie.....	Dec. 30, 1873	882	286	4	703
134, 981	Dibble, S. J., Weathersfield, Conn. Thill-coupling.....	Jan. 21, 1873	454	145	3	72
145, 491	Dibble, S. J., Lockport, N. Y. Portable stove.....	Dec. 16, 1873	410	135	4	642
	Dick, C. J. A. (See Gifford, P., assignor.)					
139, 458	Dick, D., assignor to B. M. Barmore, New York, N. Y. Door-spring.....	June 3, 1873	14	4	3	610
	Dick, J. (See Meyer & Dick.)					
	Dick, J. (See Meyer, G., assignor.)					
136, 423	Dick, W., New York, N. Y. Bottle-washer.....	Mar. 4, 1873	59	21	3	250
141, 547	Dickennan, A., Boston, Mass. Canvas stretching and protecting frame.....	Aug. 5, 1873	120	37	4	145
138, 235	Dickerman, E., Middlefield, Conn. Washing-machine.....	Apr. 29, 1873	900	284	3	472
5, 507	Dickerson, S. H., Hudson, Mich. Well-tube..... (Reissue)	July 29, 1873	1,017	330	4	126
5, 508	Same..... Earth-auger..... (Reissue)	July 29, 1873	1,018	330	4	126
5, 327	Dickerson, T. S., assignor to self and R. M. Whipple, Chicago, Ill. Manufacture and application of gas from petroleum, &c..... (Reissue)	Mar. 18, 1873	625	206	3	314
5, 326	Dickerson, T. S., and R. M. Whipple, Chicago, Ill. Process and apparatus for using liquid fuel for producing heat and light..... (Reissue)	Mar. 18, 1873	624	206	3	314
	Dickey, G. W. (See Arnot, H., assignor.)					
143, 441	Dickinson, A. S., Brooklyn, N. Y. Pulley-block.....	Oct. 7, 1873	38	14	4	384
137, 349	Dickinson, C. H., Rosedale, La. Hydraulic cane-crusher.....	Apr. 1, 1873	67	21	3	362
140, 899	Dickinson, C. W., Belleville, assignor to self and G. Rowden, Newark, N. J. Numbering heads.....	July 15, 1873	495	167	4	68
	Dickinson, F. Z., et al. (See McGregor & Vall, assignors) (Reissue.)					
144, 324	Dickinson, G. W., Saratoga Springs, N. Y. Billiard-cue tip.....	Nov. 4, 1873	126	42	4	489
	Dickinson, T. M. (See Mack, B. L., assignor.)					
137, 536	Dickson, R., Lansingburgh, N. Y. Horse-brush.....	Apr. 8, 1873	242	74	3	388
145, 634	Diehl, L. J., Butler, Ind. Bee-hive.....	Dec. 16, 1873	539	177	4	653
136, 142	Diehl, P., Chicago, Ill. Magic-lantern.....	Feb. 25, 1873	709	229	3	221
140, 351	Diehl, R. C., Scott Township, Pa. Shifting top for buggies.....	July 1, 1873	16	5	4	9
143, 677	Dietrich, C., Boston, Mass. Fire-escape.....	Oct. 14, 1873	258	85, 86	4	410
	Dietrich, F. (See Schüssler & Dietrich.)					
	Dietrich, C. F. (See Norman & Dietrich.)					
144, 070	Dietz, R. E., New York, N. Y. Lamp.....	Oct. 28, 1873	644	212	4	461
	Dietzel, G. (See Vogt & Dietzel.)					
139, 376	Digney, J. D., and T. H. Lartigue, and H. Forest, Paris, France. Electric railway-signal.....	May 27, 1873	832	{ 266 } 267	3	596
	Digney, T. (See Digney, J. D. and T. H., Lartigue, and H. Forest.)					
	Dilkes, J. (See Goldsmith & Dilkes.)					
136, 908	Dillan, P. C., Villisca, Iowa. Washing-machine.....	Mar. 18, 1873	503	166	3	304
136, 143	Dillenbeck, A., Fort Plain, N. Y. Die for making clips for king-bolts.....	Feb. 25, 1873	710	229	3	221
	Dilley, J. (See Currie, C. S., assignor.)					
	Dillingham, E., et al. (See Crowell, L. C., assignor.)					
	Dillingham, G. F. (See Wing, A. T., assignor.)					
135, 469	Dillingham, M. W., Amsterdam, N. Y. Paper box.....	Feb. 4, 1873	71	22	3	133
	Dillingham, N., et al. (See Crowell, L. C., assignor.)					
144, 263	Dillon, J., New York, N. Y. Adjustable scaffold.....	Nov. 4, 1873	79	26	4	484
145, 992	Same..... Compound tool.....	Dec. 30, 1873	883	286	4	703
135, 634	Dillon, M., assignor to self and J. B. Armour, Albany, N. Y. Brush-machine.....	Feb. 11, 1873	236	74	3	158
135, 635	Same..... Paint-brush.....	Feb. 11, 1873	237	74	3	158
5, 394	Dilworth, J., Muskoka District, Canada, and J. C. Hodgins, Toronto, Canada, said Dilworth assignor to T. K. Morgan and H. Thorn, Toronto, Canada. Condenser and feed-water heater for steam-engines..... (Reissue)	May 6, 1873	238	74	3	517
5, 378	Dimes, R., assignor to Tiffany & Co., New York, N. Y. Process and apparatus for stippling metallic surfaces..... (Reissue)	Apr. 29, 1873	1,110	351	3	489
143, 313	Dimmick, D., Orwell Township, Bradford County, Pa. Vehicle-wheel.....	Oct. 21, 1873	402	134	4	431
139, 302	D'Infreville, G., New York, N. Y. Electro-magnetic telegraph.....	May 27, 1873	778	247	3	591

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 976	Dinsmore, A. S., Boston, Mass. Sewing-machine	Mar. 18, 1873	559	186	3	308
145, 790	Dinsmore, J. H., Boston, Mass. Locomotive-window	Dec. 23, 1873	685	224	4	677
	Dinsmore, T. H. (See Stewart, W. A., assignor.)					
	Same.....(See Trask, W. R., assignor.)					
	Diolot, S. (See Haack & Diolot.)					
136, 046	Dirksen, G., Freeport, Ill. Uterine supporter	Feb. 18, 1873	603	198	3	201
135, 896	Dirst, A. L., Seward, Ill. Clod-fender	Feb. 18, 1873	481	155	3	191
144, 264	Discher, G. H., Mobile, Ala. Combined extension measuring-rod and dividers	Nov. 4, 1873	80	26	4	484
138, 486	Dismer, G., Mound City, Ill. Velocipede	May 6, 1873	17	6	3	499
140, 124	Disney, M., Oakland, Cal., assignor to self, H. C. Kibbe, and J. D. Hildreth. Car-coupling	June 24, 1873	646	203	3	692
	Diss, A. B. (See Kennedy & Diss.)					
	Diss, F. A. J. (See Fancher, C. H., assignor.)					
142, 900	Disston, H., Philadelphia, Pa. Tip for saw-files	Sept. 16, 1873	514	175	4	306
143, 445	Same.....File	Sept. 2, 1873	111	36	4	251
	Disston, H., and Sons. (See Disston, T. S., assignor.)					
	Same.....(See Disston, T. S. and H., 2d, assignor)					
	Same.....(See Tilton, W. C., assignor.)					
134, 982	Disston, T. S., Philadelphia, Pa. Cork-cutting machine	Jan. 21, 1873	455	146	3	72
143, 128	Disston, T. S., assignor to self and H. Disston & Sons, Philadelphia, Pa. Hand-saw	Sept. 23, 1873	708	243	4	332
6, 825	Disston, T. S. and H., 2d, assignors to selves and H. Disston & Sons, Philadelphia, Pa. Saw-frame	Aug. 26, 1873			4	212
	Same.....(Design.)					
144, 963	Ditch, J., Five Forks, Pa. Stock for shoeing animals	Nov. 25, 1873	689	233	4	568
141, 334	Di Tergolina, V., London, England. Bridle-bit	July 29, 1873	930	303	4	120
143, 446	Dittenhaver, J. B., Napoleon, Ohio. Compound for filling wood	Sept. 2, 1873	112		4	251
144, 964	Dittman, C., assignor to self and D. N. Landis, jr., Leacock Post-office, Pa. Nut-lock	Nov. 25, 1873	690	233	4	568
145, 403	Dittman, C., Boston, Mass. Explosive compound	Dec. 9, 1873	327		4	624
	Dixie Oil Company. (See Hatfield, G. W., assignor.)					
135, 636	Dixon, A. H., Toronto, Canada. Show-card	Feb. 11, 1873	238	75	3	158
145, 492	Dixon, E. and W., Newark, N. J. Buffing-wheel	Dec. 16, 1873	411	135	4	642
141, 859	Dixon, G., Toronto, Canada. Railway-car truck	Aug. 19, 1873	416	{ 135 } { 136 }	{ 4 }	186
	Dixon, H. J., & Sons. (See Gilmore, W., assignor)					
	Same.....(See Powell, J., assignor)					
140, 019	Dixon, M. J., New York, N. Y., and W. Tunstill, Brooklyn, N. Y. Ice-crusher	June 17, 1873	531	168	3	675
135, 097	Dixon, S., Nottingham, England. Corset	Jan. 21, 1873	553	180	3	80
135, 098	Dixon, S., Roseville, Ill. Corn-planter	Jan. 21, 1873	553	180	3	80
	Dixon, W. (See Dixon, E. & W.)					
	Doane, D. E. (See Dale, J. P., assignor.)					
134, 650	Doane, W. H., assignor to J. A. Fay & Co., Cincinnati, Ohio. Scroll-saw	Jan. 7, 1873	142	45	3	18
135, 099	Doane, W. H., and W. H. Dobson, assignors to J. A. Fay & Co., Cincinnati, Ohio. Scroll-saw	Jan. 21, 1873	554	181	3	80
135, 413	Dobbins, J., Litchfield, Mich. Machine for cutting and bending hoops	Feb. 4, 1873	18	6	3	129
	Dobbins, L. (See Saladee, C. W., assignor)					
142, 214	Dobbins, W. C., Zanesville, Ohio. Combined fender and ash-sifter	Aug. 26, 1873	748	247	4	222
143, 678	Dobbs, T. J., Weehawken, N. J. Harness attachment for hitching and unhitching horses	Oct. 14, 1873	258	86	4	410
136, 491	Dobson, H. C., New York, assignor to H. Sontag, Stapleton, N. Y. Banjo	Mar. 4, 1873	121	39	3	255
	Dobson, J., et al. (See Shinn, J., assignor.)					
144, 839	Dobson, J., Philadelphia, Pa. Machinery for finishing the nap of woolen cloth	Nov. 25, 1873	589	201	4	559
	Dobson, J. & J. (See Webster, J. T., assignor)					
144, 840	Dobson, J. & J., Philadelphia, Pa. Apparatus for delivering and drawing long-fibered wool after carding	Nov. 25, 1873	589	201	4	559
134, 651	Dobson, R. F., assignor of one-third interest to G. Frost, Belmont, Wis. Hydraulic engine	Jan. 7, 1873	143	46	3	18
	Dobson, W. (See Rushton & Dobson.)					
	Dobson, W. H. (See Doane & Dobson.)					
139, 124	Dobson, W. H., assignor to J. A. Fay & Co., Cincinnati, Ohio. Saw-setting machine.	May 20, 1873	601	189	3	569
135, 529	Dod, S., Havana, Cuba. Apparatus for the manufacture of sugar	Feb. 4, 1873	123	39	3	137
	Dodge, C. F. (See Tiffany, J. C., assignor.)					
	Dodge, D., Keeseville, N. Y. Nail-machine	Aug. 23, 1873			4	185
	Same.....same	Aug. 30, 1873			4	212
140, 255	Dodge, H., assignor of one-half interest to C. Germain, Beaver Dam, Wis. Telegraph-pole	June 24, 1873	755	238	3	701
136, 424	Dodge, J. M., Newark, N. J. Car-axle box	Mar. 4, 1873	60	21	3	250
5, 420	Dodge, J. W., Malden, Mass. Branding apparatus	May 20, 1873	704	221	3	578
136, 710	Dodge, J. W., Malden, Mass., assignor to The Shoe Machinery Manufacturing Company, Connecticut. Branding-stamps	Mar. 11, 1873	326	108	3	280
144, 515	Same.....Tool for marking edges of soles of boots and shoes	Nov. 11, 1873	294	99	4	514
	Dodge, L. (See Wescott, B. S., assignor.)					
	Dodge, L. P. (See Kingdon & Dodge.)					
136, 711	Dodge, O. H., Jackson, Tenn. Roller-skate	Mar. 11, 1873	327	108	3	280
	Dodge, P., deceased, by W. M. Pingry, administ'r, Weathersfield, Vt. Stove	Feb. 1, 1873			3	70
	Dodge, S., jr., and B. Potter, jr., Marblehead, Mass. Heel for boots and shoes. (Extension)	Sept. 13, 1873			4	270
139, 498	Dods, R., Southington, Conn. Whip-socket attachment	June 3, 1873	49	15	3	613
139, 377	Dodson, G. W., Mitchell, Ind. Coffee-roaster	May 27, 1873	834	267	3	596
138, 619	Dodson, J. T., Kane, Ill. Draft-hook for whiffletrees, &c	May 6, 1873	131	43	3	508
140, 483	Dodson, W. P., Philadelphia, Pa. Sad-iron	July 1, 1873	118	40	4	18
	Dodsworth, J. (See Madden & Dodsworth)					
144, 265	Doeg, I., assignor of one-half interest to O. Murray, New Market, N. H. Device for dressing the sides of nuts	Nov. 4, 1873	81	26	4	484
	Doeltz, W. (See Arndt, A. F. R., assignor.)					
	Doerfer, P. (See Mörchen & Doerfer.)					
145, 729	Dohan, J. F., Binghamton, N. Y. Hand-mirror	Dec. 23, 1873	634	207	4	673
134, 860	Doherty, M., Cambridgeport, Mass. Music-desk for pianos	Jan. 14, 1873	337	108	3	47
139, 125	Doherty, M., Cambridgeport, assignor of one-half interest to C. Skinner, Boston, Mass. Piano-lid prop-stick	May 20, 1873	603	189	3	570
1 34, 652	Doherty, P. W., Boston, Mass. Stench-trap	Jan. 7, 1873	144	46	3	18
	Domstreich, F. L. (See Jakel, J., assignor.)					
	Dolan, T., et al. (See Langham, T., assignor)					
	Same.....(See Wink, F., assignor)					
	Dolan, T., & Co. (See Boot, H., assignor.)					
	Same.....same					
	Same.....(See Osborne, O., assignor.)					
	Same.....(See Parks, J. W., assignor)					
	Dolan, W., et al. (See Hills, H. C., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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141, 208	Doll, A., Cleveland, Ohio. Adjustable stool.....	July 29, 1873	813	266	4	110
144, 516	Doll, A., and C. Elling, Cleveland, Ohio. Faucet.....	Nov. 11, 1873	295	100	4	514
144, 071	Dolph, A. M., Cincinnati, Ohio. Starching-machine.....	Oct. 28, 1873	645	212	4	461
143, 901	Dolson, H. P., Highland, N. Y. Spring-coupling for vehicles.....	Sept. 16, 1873	514	175	4	306
	Dolton, G. E. (See Ward & Dolton.)					
139, 883	Dolton, G. E., Monee, Ill. Ruffler for sewing-machines.....	June 17, 1873	419	131	3	666
136, 425	Dom, J. L., Hamilton County, Ohio. Wheel for vehicles.....	Mar. 4, 1873	60	21	3	250
135, 208	Domett, J. W., Boston, Mass. Safety-check for horses.....	Jan. 28, 1873	670	216	3	102
135, 322	Doming, G., assignor of one-half interest to J. Russell, Weymouth, England. Music } leaf-turner.....	Jan. 28, 1873	771	{ 249 250 }	{ 3 3 }	{ 110 110 }
140, 686	Donald, D., Williamsburgh, N. Y. Baker's oven.....	July 8, 1873	307	104	4	44
135, 785	Donald, F., and G. S. Newton, Waupun, Wis. Derrick.....	Feb. 11, 1873	364	117	3	168
5, 491	Donaldson, N. L., Worcester, Mass. Inhaler..... (Reissue)	July 15, 1873	593	200	4	76
134, 861	Same..... Medical inhaler.....	Jan. 14, 1873	339	108	3	47
140, 256	Donehoo, D. M., Beaver, Pa. Sash-fastener.....	June 24, 1873	756	239	3	701
	Doney, A. (See Baker & Doney.)					
	Same..... (See Baker, Doney & Owen.)					
145, 056	Donisthorpe, R. F., and T. A. W. Clarke, Leicester, England. Manufacture of crimped hair.....	Dec. 2, 1873	14	5, 6	4	587
134, 653	Donn, H. D., Oshkosh, Wis. Saw-mill dog.....	Jan. 7, 1873	144	46	3	18
134, 862	Donnell, H., Philadelphia, Pa. Carriage-curtain.....	Jan. 14, 1873	340	108	3	47
	Donnell, J. F. (See Schofield, W. H., assignor.)					
141, 705	Donnelly, W., Calverton, N. Y. Plow.....	Aug. 12, 1873	272	88	4	165
142, 775	Donohue, T. H., Washington, D. C. Apparatus for cleaning boiler-flues, &c.....	Sept. 16, 1873	415	140	4	298
	Donovan, F. J. (See Hafford, A. T., assignor.)					
141, 209	Dooling, J., Boston, Mass. Ice-cream freezer.....	July 29, 1873	813	266	4	110
	Doolittle, E. W. (See Lowe, P. W., assignor.)					
136, 977	Doolittle, G., assignor to The Doolittle Manufacturing Company, Bridgeport, Conn. Suspension-ring.....	Mar. 18, 1873	560	186	3	309
144, 325	Doolittle, G., Bridgeport, Conn. Tidy-pin.....	Nov. 4, 1873	127	42	4	489
139, 499	Doolittle, J. B., Wallingford, Conn. Mechanical movement.....	June 3, 1873	50	16	3	613
140, 687	Doolittle, J. H., assignor to Wallace & Sons, Ansonia, Conn. Lamp-burner.....	July 8, 1873	307	104	4	45
	Doolittle Manufacturing Company. (See Doolittle, G., assignor.)					
	Same..... (See Ellis, J. M., assignor.)					
143, 679	Doolittle, T. B., Bridgeport, Conn. Electric vote-annunciator.....	Oct. 14, 1873	259	86	4	410
142, 215	Dopp, W. H., Buffalo, assignor of two-thirds interest to F. C. Candee, New York, N. Y. Nut-lock.....	Aug. 26, 1873	748	247	4	222
	Dorchester, E., et al. (See Baird, O. D., assignor.)					
	Dore, B. (See Hawkins, L. P., assignor.)					
	Dore, B., et al. (See Ross & Miller, assignors.)					
	Same..... (See Ross, J. G., assignor.)					
	Doremus, D., et al. (See Van Derzee, C., assignor.)					
134, 593	Doremus, W. T., New York, N. Y. Chair seat and back.....	Jan. 7, 1873	89	28	3	14
135, 973	Same..... Seat for chairs, &c.....	Feb. 18, 1873	540	179	3	196
135, 974	Same..... Oscillating-chair.....	Feb. 18, 1873	540	179	3	196
137, 600	Same..... Furniture-spring.....	Apr. 8, 1873	297	92	3	392
138, 320	Same..... Cradle.....	Apr. 29, 1873	986	310	3	479
139, 948	Same..... Chair.....	June 17, 1873	473	149	3	670
140, 188	Same..... Furniture-spring.....	June 24, 1873	702	221	3	697
140, 189	Same..... same.....	June 24, 1873	703	221	3	697
144, 020	Same..... Spring for chairs, &c.....	Oct. 28, 1873	603	199	4	457
144, 664	Same..... same.....	Nov. 18, 1873	430	145	4	536
145, 404	Doring, E. N., New York, N. Y. Sofa-bed.....	Dec. 9, 1873	328	110	4	624
5, 509	Dorman, L., Willimantic, Conn., assignor to C. W. Fillmore and J. R. Miner. Wheel for vehicles..... (Reissue)	July 29, 1873	1, 018	330	4	126
	Dorman, O. P. (See Betts, R. W., assignor)..... (Design.)					
137, 537	Dorman, O. P., New York, N. Y. Shirt-collar.....	Apr. 8, 1873	242	74	3	388
6, 354	Dornan, J., Philadelphia, Pa. Carpet..... (Design)	Jan. 21, 1873			3	70
6, 811	Dornan, J., assignor to Dornan, Maybin & Co., Philadelphia, Pa. Carpet..... (Design)	Aug. 19, 1873			8	185
142, 681	Dornan, J., Philadelphia, Pa. Carpet..... (Design)	Sept. 9, 1873	322	107	4	280
	Dornan, Maybin & Co. (See Dornan, J., assignor)..... (Design)					
	Same..... (See Richter, C. A., assignor)..... (Design)					
143, 408	Dorsett, F., sr., Chicago, Ill., assignor to C. Parker, Meriden, Conn. Boot-jack.....	Oct. 7, 1873	10	3	4	381
141, 924	Dorsey, D. B., assignor of one-half interest to J. De Sha, Chillicothe, Mo. Washing- machine.....	Aug. 19, 1873	479	158	4	191
145, 730	Dorsey, D. B., assignor of one-half interest to E. J. Marsh, Chillicothe, Mo. Carriage-top. Dorsey, R. S., et al. (See Tucker, C. and W. H., assignors)..... (Reissue)	Dec. 23, 1873	634	208	4	673
142, 376	Dorwart, B. K., Rockland, assignor to self and I. C. Winsor, Coventry, R. I. Revolving fire-arm.....	Sept. 2, 1873	49	17	4	246
	Doty, E. (See Judd & Doty.)					
	Doty, F. M. (See Savage & Doty.)					
140, 767	Doty, J., Buffalo, N. Y. Feeding-mechanism for rock-drills.....	July 15, 1873	380	131	4	59
143, 902	Doty, J. W., Lockport, N. Y. Bob-sled.....	Sept. 16, 1873	515	175	4	306
141, 636	Doty, L., Frankfort, Ill. Device for baling hay.....	Aug. 12, 1873	215	68	4	160
138, 078	Doty, W. M., New York, N. Y. Lifting-jack.....	Apr. 22, 1873	742	235	3	451
	Doubleday, H. H. (See Foster, T. N., assignor)..... (Reissue)					
136, 222	Doubleday, M. C., Sharon, Vt. Car-coupling.....	Feb. 25, 1873	769	249	3	225
141, 210	Doubler, J. W. H., West Alden, N. Y. Harvester-cutter.....	July 29, 1873	815	266	4	110
143, 903	Same..... Harvester.....	Sept. 16, 1873	516	176	4	306
144, 072	Same..... Whip-socket.....	Oct. 28, 1873	646	213	4	461
144, 073	Same..... same.....	Oct. 28, 1873	647	213	4	461
139, 662	Doubrava, F., and J. Staib, Hartford, Conn. Wood blocks for flooring.....	June 10, 1873	204	67	3	641
141, 637	Doud, E., Oshkosh, Wis. Sieve for grain-separators.....	Aug. 12, 1873	215	68	4	160
140, 484	Doud, J. W., Ward's Corner, Iowa. Cultivator.....	July 1, 1873	119	41	4	18
134, 778	Dougherty, J., Somerville, Mass. Pot for melting glass.....	Jan. 14, 1873	276	90	3	42
139, 789	Dougherty, W., Philadelphia, Pa. Manufacture of steel.....	June 10, 1873	320	99	3	650
136, 223	Doughty, C. H., Newburgh, N. Y. Candlestick.....	Feb. 25, 1873	770	249	3	225
138, 487	Doughty, S. H., Nyack, N. Y. Buckle.....	May 6, 1873	17	6	3	499
144, 448	Douglas, C. A., Franklin, N. Y. Milk-cooler.....	Nov. 11, 1873	240	81	4	509
140, 996	Douglas, C. H., Hartford, Conn. Cooking-stove.....	July 22, 1873	606	204	4	86
141, 965	Douglas, J. W., assignor to W. and B. Douglas, Middletown, Conn. Pump.....	Nov. 25, 1873	691	233	4	568
	Douglass, B. (See Brereton, R., assignor.)					
144, 074	Douglass, G., Bridgeport, Conn. Spike-bar.....	Oct. 28, 1873	647	213	4	461
135, 637	Douglass, J. A., and J. Wagner, said Douglass assignor to said Wagner, Chester Springs, Pa. Machine for shaving hoops.....	Feb. 11, 1873	239	75	3	158

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No.	Name, residence, and invention,	Date.	Monthly volume.		Official Gazette.	
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142, 330	Douglass, W., Pittsburgh, Pa., and J. H. Brown, Youngstown, Ohio. Steam-boiler.	Sept. 2, 1873	7	3	4	242
	Douglass, W. and B. (See Douglass, J. W., assignor.)					
	Dovey, J. F. (See Insull & Dovey.)					
141, 639	Dow, G. W., Brooklyn, N. Y. Propelling vessels.	July 22, 1873	643	216	4	89
139, 709	Dowd, H. M., Saratoga Springs, and W. W. Dowd, jr., North Granville, N. Y. Potato-digger.	June 10, 1873	254	80	3	645
	Dowd, W. W. (See Dowd, H. M. and W. W., jr.)					
142, 682	Dowling, R. H., assignor to J. F. Wilson, Newark, Ohio. Car-coupling.	Sept. 9, 1873	323	107	4	280
145, 993	Dowling, T. W., Pontiac, Mich. Scroll-sawing machine.	Dec. 30, 1873	884	286	4	703
137, 661	Downer, P. A., Baldwin, Iowa. Washing-machine.	Apr. 8, 1873	350	108	3	397
5, 518	Downes, C. H., Hudson City, N. J. Pen and pencil case. (Reissue)	Aug. 5, 1873	182	58	4	150
5, 704	Downing, B. J., Mitchell, Iowa. Horse hay-rake. (Reissue)	Dec. 23, 1873	819	267	4	687
143, 278	Same. same.	Sept. 30, 1873	838	288	4	359
135, 786	Downing, E. H., and W. Joint, Lynn, Mass. Machines for burnishing heels.	Feb. 11, 1873	365	118	3	168
138, 620	Downing, J. F., Erie, Pa. Child's chair.	May 6, 1873	132	43	3	508
140, 900	Same. same.	July 15, 1873	497	{ 167 168 }	{ 4 3 }	{ 68 163 }
135, 701	Downing, J. F. and W., Erie, Pa. Wheel for vehicles.	Feb. 11, 1873	296	94	3	163
138, 867	Downing, L. H., North Andover, Mass. Hydraulic hose.	May 13, 1873	366	114	3	537
	Downing, W. (See Downing, J. F. and W.)					
141, 706	Downing, W. H., assignor of one-half interest to B. Masseth, Shamburgh, Pa. Rope-clamp.	Aug. 12, 1873	273	89	4	165
134, 594	Downs, H. G., Seneca Falls, N. Y. Car-axle box.	Jan. 7, 1873	89	28	3	14
138, 796	Downs, T. B., and W. D. Morris, Jefferson City, Mo. Stool for dental-chairs.	May 13, 1873	305	94	3	532
134, 654	Downs, W. C., Providence, R. I. Suction-hose.	Jan. 7, 1873	145	46	3	18
	Downs, W. E., et al. (See Harrington, I., assignor.)					
143, 442	Downton, R. L., Collinsville, Ill. Middlings-separator.	Oct. 7, 1873	39	14	4	384
143, 228	Doyle, J. A. and J. A. Murphy, Lancaster, Pa. Printer's galley-rest.	Sept. 30, 1873	796	274	4	355
	Doyle, R. (See Connolly, J. D., assignor.)					
	Doyle, W., et al. (See Zellers, T. A., assignor.)					
5, 356	Doyle, W., Birmingham, Pa. Jelly-glass. (Reissue)	Apr. 15, 1873	656	206	3	435
6, 586	Doyle, W., Albany, N. Y. Parlor-stove. (Design)	Apr. 15, 1873			3	417
136, 492	Doyle, W., Birmingham, Pa. Jelly-tumbler.	Mar. 4, 1873	121	39	3	255
141, 770	Doyle, W., Albany, N. Y. Base-burning stove.	Aug. 12, 1873	328	108	4	170
145, 932	Same. Stove-leg.	Dec. 30, 1873	829	270	4	699
	Doyle, W. H. (See Stimely, W. H., assignor.)					
142, 843	Drake, A. J., Middletown, N. Y. Butter-tub.	Sept. 16, 1873	469	159	4	302
137, 186	Drake, E., Stoughton, assignor to self and J. S. Smith, Leicester, Mass. Combined percussion and time-fuse for shells.	Mar. 25, 1873	759	251	3	335
139, 663	Drake, H., Attleborough, Mass. Carriage-curtain fastening.	June 10, 1873	204	67	3	642
139, 500	Drake, H. L., Lynn, Mass. Heel-plate.	June 3, 1873	51	16	3	613
143, 067	Drake, J. B., Goshen, Ind. Saw-sharpening device.	Sept. 23, 1873	663	227	4	328
140, 688	Drake, M. D., Trenton, Ky. Scaffold.	July 8, 1873	308	{ 104 105 }	{ 4 3 }	{ 45 298 }
	Drake, M. M. (See Hunt, L., assignor.)					
136, 821	Drake, M. S., Newark, N. J. Adjustable ingot-mold.	Mar. 18, 1873	433	143	3	298
	Drake, S. N. (See Simpson & Drake.)					
140, 352	Drake, W. L., Evanston, Ill. Fire-proof tile-floor.	July 1, 1873	16	5	4	9
145, 405	Same. Fire-extinguisher.	Dec. 9, 1873	330	110	4	624
145, 406	Same. same.	Dec. 9, 1873	331	111	4	624
	Draper, G. (See Bancroft, J. B., assignor.)					
	Draper, G. (See Laflin, P., assignor.)					
134, 863	Draper, G., Hopedale, Mass. Spindle-bolster and step for spinning-frame.	Jan. 14, 1873	340	109	3	47
134, 864	Same. Spinning-frame.	Jan. 14, 1873	342	109	3	47
	Draper, G., and Son. (See Jenckes, W., assignor.)					
	Draper, G. N., administrator. (See Draper, J.)					
135, 975	Draper, I. C., New York, N. Y. Fruit-fork. (Extension)	Feb. 18, 1873	541	179	3	196
	Draper, J., deceased, by G. N. Draper, administrator, Brooklyn, N. Y. Skeleton-skirt. (Extension)	Oct. 4, 1873			4	354
	Draper, O. M. (See Draper, V., assignor.)					
137, 897	Draper, R. E., Enfield, N. C. Shoe pegging and trimming machine.	Apr. 15, 1873	564	177	3	427
6, 781	Draper, V., North Attleborough, Mass., assignor to O. M. Draper, Bristol, Mass. Ornamental chain-link. (Design)	July 22, 1873			4	85
6, 782	Same. same. (Design)	July 22, 1873			4	85
6, 783	Same. same. (Design)	July 22, 1873			4	85
	Draper, W. F. (See Bancroft, J. B., assignor.)					
136, 591	Drasser, C., Chicago, Ill. Slate.	Mar. 11, 1873	229	77	3	273
137, 350	Dreher, A., Cleveland, Ohio. Reed-organ.	Apr. 1, 1873	67	21	3	362
141, 335	Dressel, H., Springfield, Vt. Shifting-rail for carriage-seats.	July 29, 1873	930	303	4	120
143, 970	Dreusike, J., New York, N. Y. Bottom for beds, &c.	Oct. 28, 1873	554	184	4	453
145, 851	Drew, J., Wenona, Ill. Lightning-rod.	Dec. 23, 1873	736	241	4	681
145, 407	Drew, J. C., Auburn, Me. Lasting-jack for boots.	Dec. 9, 1873	332	111	4	624
6, 711	Dreyer, B., assignor to W. H. French, Philadelphia, Pa. Center-piece for ceilings. (Design)	June 24, 1873			3	691
6, 712	Same. Center-piece for ceilings. (Design)				3	691
	Dreyer, H. (See Dulany & Dreyer.)					
136, 712	Driesslein, C. L., Chicago, Ill. Machine for mining coal.	Mar. 11, 1873	328	108	3	281
142, 216	Drips, W. H., Cincinnati, Ohio. Plane for cutting cigar-lighters.	Aug. 26, 1873	749	247	4	222
140, 257	Driver, J., Marysville, Cal. Mortising-machine.	June 24, 1873	756	239	3	701
145, 408	Drown, W. A., jr., Philadelphia, Pa. Umbrella-supporter.	Dec. 9, 1873	332	111	4	624
	Drum, W. C. (See Strawn & Drum.)					
	Drummer, P. E. (See Malmström & Drummer.)					
	Drury, B. C., et al. (See Leonard, T. D., assignor.)					
143, 447	Dubber, J. F., Brooklyn, N. Y. Clasp for pocket-books.	Sept. 2, 1873	113	36	4	251
	Dubler, J. B. (See Stewart & Dubler)					
136, 978	Du Bois, C., Fishkill Landing, N. Y. Elevator.	Mar. 18, 1873	560	{ 186 187 }	{ 3 3 }	{ 309 528 }
138, 740	Du Bois, F. N., New York, N. Y. Tool for use in lacing belts.	May 13, 1873	256	79	3	133
135, 470	Du Bois, H. M., assignor to self and W. Filter, Philadelphia, Pa. Hub for vehicles.	Feb. 4, 1873	71	22	3	362
137, 351	Du Bois, O., San José, Cal. Track-clearer for harvesters.	Apr. 1, 1873	68	22	4	280
142, 683	Du Brul, N., Chicago, Ill. Cigar-mold.	Sept. 9, 1873	323	108	3	563
144, 893	Du Chateau, A., and J. D. Williams, Green Bay, Wis. Folding-pail.	Nov. 25, 1873	632	215	4	298
136, 822	Duchemin, P. F., Somerville, Mass. Reversible car-seat.	Mar. 18, 1873	434	144	3	76
135, 032	Duchemin, W., assignor to self and G. B. Bigelow, trustee, Boston, Mass. Sewing-machine for boots and shoes.	Jan. 21, 1873	503	162	3	

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 787	Duchemin, W., assignor to G. B. Bigelow, trustee, Boston, Mass. Sewing-machine for boots and shoes.	Feb. 11, 1873	366	{ 118 119 }	{ 3 3 }	168
140, 258	Duchemin, W., assignor to W. Duchemin, trustee, Boston, Mass. Turned shoe.	June 24, 1873	757	239	3	702
141, 860	Ducker, W. M., Brooklyn, N. Y. Sectional folding-frame for boats.	Aug. 19, 1873	417	136	4	186
137, 898	Duckworth, J. C., Mount Carmel, Conn., assignor by mesne assignment to G. Crompton, Worcester, Mass. Loom.	Apr. 15, 1873	566	{ 177 178 }	{ 3 3 }	427
138, 139	Duckworth, W. B., Hamden, assignor to J. McLagon and H. Smith, New Haven, Conn. Clutch for machinery.	Apr. 22, 1873	790	252	3	455
137, 765	Dudgeon, R., New York, N. Y. Hydraulic jack.	Apr. 15, 1873	454	{ 141 142 }	{ 3 3 }	418
134, 738	Dudley, G. D., assignor to E. P. Woods, D. Sherwood, and C. H. Latham, Lowell, Mass. Caster-stand.	Jan. 14, 1873	232	75	3	39
145, 283	Same..... Wire-stand or holder.	Dec. 9, 1873	226	76	4	616
145, 284	Same..... Wire-bottle stand.	Dec. 9, 1873	227	76	4	616
145, 285	Same..... Wire.	Dec. 9, 1873	227	77	4	616
139, 303	Dudley, G. S., Dixon, Cal. Grain raker and loader.	May 27, 1873	779	247	3	591
137, 899	Dudley, R., Erie, Pa. Torsion-spring for vehicles.	Apr. 15, 1873	569	179	3	428
	Dudley, W. J. (See Jamison, S. W., assignor.)					
139, 779	Dueber, J. C., Cincinnati, Ohio. Watch-case.	June 10, 1873	321	100	3	650
141, 125	Same..... Manufacture of push-top for watches.	July 22, 1873	718	239	4	95
141, 861	Same..... Manufacture of watch-case centers.	Aug. 19, 1873	418	136	4	186
142, 684	Same..... Watch-case latch.	Sept. 9, 1873	324	108	4	280
145, 994	Duecker, C., Lively Grove, Ill. Spring for the seats of vehicles.	Dec. 30, 1873	884	287	4	703
	Duenz, E., administratrix. (See Bodmer, C.)					
	Duenz, J. A., administrator. (See Bodmer, C.)					
141, 771	Duerstock, B., Cincinnati, Ohio. Stove.	Aug. 12, 1873	329	108	4	170
145, 933	Duesler, D., Coldwater, Mich. Grain-cradle.	Dec. 30, 1873	830	271	4	699
137, 662	Duff, J. B., New York, N. Y. Governor.	Apr. 8, 1873	350	108	3	397
142, 561	Duffee, E., assignor to self and H. M. Bragg, Haverhill, Mass. Wool-drying frame.	Sept. 9, 1873	224	73	4	272
136, 224	Duffield, W. C., assignor to self and J. A. Faris, Wheeling, W. Va. Privy indicator.	Feb. 25, 1873	770	249	3	225
138, 741	Duffner, E., Vicksburgh, Miss. Automatic fan.	May 13, 1873	257	80	3	528
143, 129	Duffner, W., Jasper, Ind. Stump-extractor.	Sept. 23, 1873	709	243	4	332
139, 304	Duffy, E., Oakland, Cal. Saw sharpening and setting machine.	May 27, 1873	781	248	3	591
	Dufour, F. R. (See Siebenthal, A., assignor.)					
142, 685	Dugan, New York, N. Y. Casing for bottles.	Sept. 9, 1873	325	108	4	280
145, 409	Dugan, J. H., Bloomfield, N. J. Rinsing alkaline solutions from treating straw.	Dec. 9, 1873	333	112	4	624
144, 021	Dugan, J. H., and G. Moncrief, Stoneham, Mass. Umbrella.	Oct. 28, 1873	603	200	4	458
143, 889	Dugdale, E., Griffin, Ga. Coffee substitute.	Oct. 21, 1873	466	.....	4	436
143, 890	Same..... same.	Oct. 21, 1873	467	.....	4	436
	Duggan, H. C. (See Warwick & Duggan.)					
	Duguid, H. L. (See Hisley, J. P., assignor.)					
144, 075	Dulany, J. J., and H. Dreyer, Oakland, Tex. Process for destroying ants.	Oct. 28, 1873	648	.....	4	461
136, 713	Dumont, J. F., Kansas City, Mo. Butter-bucket.	Mar. 11, 1873	328	108	3	281
144, 517	Du Motay, C. M. T., Paris, France. Manufacture of baryta.	Nov. 11, 1873	295	100	4	514
141, 040	Dunbar, E. L., Bay City, Mich. Faucet-attachment.	July 22, 1873	644	217	4	89
140, 190	Dunbar, R., Buffalo, N. Y. Safety-platform for elevators.	June 24, 1873	703	221	3	697
137, 663	Dunbrack, C. H., Jacksonville, Ill. Wash-boiler.	Apr. 8, 1873	351	108	3	397
143, 561	Dunbrack, C. S., Swampscott, Mass. Boot and shoe channeling machine.	Oct. 14, 1873	155	52	4	402
	Duncan, C. H. (See Williams, A. M., assignor.)					
145, 493	Duncan, G. W., Columbia, Mo. Flood-fence.	Dec. 16, 1873	412	135	4	643
	Duncan, H. L., et al. (See Buford, A. G., assignor.)					
	Duncan, H. N. (See Michael & Duncan.)					
141, 264	Duncan, J., and W. H. Arnold, Buchanan, Mich. Hub-boring machine.	July 29, 1873	870	285	4	115
142, 998	Duncan, J. L., Fremont, Ohio. Car-coupling.	Sept. 23, 1873	604	205	4	324
142, 997	Duncan, R. A., Brooklyn, N. Y. Mangle.	Sept. 23, 1873	603	205	4	324
135, 471	Duncan, S., assignor of one-half interest to J. D. Owen, Syracuse, N. Y. Stove-grate.	Feb. 4, 1873	72	23	3	133
134, 739	Duncan, W., Lebanon, N. H. Mop-head.	Jan. 14, 1873	233	75	3	39
	Dungan, G. W. (See Wasson, Powers & Dungan.)					
	Dungan, M. D. (See Dungan, W. W., assignor.)					
136, 493	Dungan, W. W., assignor to M. D. Dungan, Baltimore, Md. Apparatus for steering vessels by steam.	Mar. 4, 1873	122	39	3	255
				{ 136 137 138 139 140 }		
141, 862	Dunham, G., Unionville, Conn. Machine for making paper-bags.	Aug. 19, 1873	419	.....	4	187
				{ 136 137 138 139 140 }		
137, 189	Dunham, G. B., assignor to S. G. Buzzell & Co., Lynn, Mass. Buffing-mandrel.	Mar. 25, 1873	760	251	3	335
135, 530	Dunham, T. R., Newark, N. J. Shawl-strap.	Feb. 4, 1873	124	39, 40	3	137
144, 518	Dunkelberger, H. G., Shamokin, Pa. Culinary utensil.	Nov. 11, 1873	298	100	4	514
	Dunkerly, J. (See Jones and J. and J. Dunkerly.)					
137, 664	Dunkerly, W. and W. H., jr., Woonsocket, R. I. Hand printing-press.	Apr. 8, 1873	352	109	3	397
	Dunkerly, W. H., jr. (See Dunkerly, W. and W. H., jr.)					
136, 979	Dunklee, B. F., Concord, N. H. Circular-saw bench.	Mar. 18, 1873	562	187	3	309
	Dunklee, B. W., Boston, Mass. Cooking-range. (Extension)	Apr. 19, 1873	.....	.....	3	415
142, 377	Dunks, C. H., New York, N. Y. Spring bed-bottom.	Sept. 2, 1873	49	17	4	246
145, 635	Dunlap, G. M., Springfield, Ohio. Thill-coupling.	Dec. 16, 1873	540	177	4	653
138, 384	Dunlap, J. C., Moffat's Creek, Va. Feed-regulator for grinding-mills.	Apr. 29, 1873	1, 035	326	3	483
136, 494	Dunlap, S., Rome, Ga. Spring bed-bottom.	Mar. 4, 1873	123	40	3	255
	Dunn, C. A. (See Little, J. R., assignor.)					
140, 486	Dunn, G. R., Newark, N. J. Seal-lock.	July 1, 1873	120	41	4	18
	Dunn, P. (See Harris & Dunn.)					
145, 339	Dunn, W. G., assignor of one-half interest to G. S. Harrall, Fairland, Ind. Railway-rail joint.	Dec. 9, 1873	275	92	4	620
	Dunning, L. O. (See Combs, E. J., assignor.)					
143, 229	Dunning, W. B., Geneva, N. Y. Pipe-coupling.	Sept. 30, 1873	797	275	4	355
137, 131	Dunton, D., Carpentersville, Ill. Temporary binder.	Mar. 25, 1873	708	235	3	332
134, 526	Dunton, U. R., United States Army. Motor for sewing-machines.	Jan. 7, 1873	21	7	3	9
139, 126	Dunwiddie, B., Monroe, Wis. Ventilating cars.	May 20, 1873	604	189	3	570
140, 406	Dupré, L. A., Donaldsonville, La. Cloth-holder for sewing-machines.	July 1, 1873	57	20	4	13
140, 485	Dupuis, G. A., Detroit, Mich. Elevating machine.	July 1, 1873	119	41	4	18
142, 686	Durand, J., New York, N. Y. Button.	Sept. 9, 1873	326	109	4	280
137, 424	Durant, A. P., Athens, Ohio. Device for filing saws.	Apr. 1, 1873	128	42	3	367
135, 788	Durant, C. W., New York, N. Y. Apparatus for treating saccharine liquids.	Feb. 11, 1873	373	119	3	168
142, 687	Durant, G. W. and J. B., Bryan, Tex. Fence-post socket.	Sept. 9, 1873	326	109	4	280
	Durant, J. B. (See Durant, G. W. and J. B.)					

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143, 337	Durbin, J. F., Pana, Ill. Wagon-brake	Sept. 30, 1873	889	304	4	363
142, 776	Durfee, J. R., Oshkosh, Wis. Bridge	Sept. 16, 1873	416	140	4	298
	Durfee, W. F. (See George & Durfee.)					
	Durham, N. A., et al. (See Clark, C. H., assignor.)					
144, 266	Durini, A., assignor to self, G. Rossi, and F. E. Miller, New York, N. Y. Watch-gear cutting-machine	Nov. 4, 1873	82	27	4	485
143, 904	Dustin, J. E., assignor to self, A. L. and W. G. Brown, Whitefield, N. H., and A. Ordway, Lawrence, Mass. Spark-arrester	Sept. 16, 1873	517	176	4	306
136, 644	Dutcher, F. J., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	Mar. 11, 1873	274	91	3	276
	Dutcher Temple Company. (See Dutcher, F. J., assignor.)					
	Same..... (See Stimpson, E. S., assignor.)					
139, 884	Dutcher, W. W., Hopedale, Mass. Loom-temple	June 17, 1873	421	131	3	666
142, 089	Dutertre, L., San Francisco, Cal. Cobble-stone facing-machine	Aug. 26, 1873	645	212	4	214
	Duttreih, A. E. (See Wilkinson, Passoz, Lafargue & Duttreih.)					
135, 323	Dutrow, D. E., Washington, D. C. Butter-printing machine	Jan. 28, 1873	775	251	3	110
138, 488	Du Val, B. R., Portsmouth, Va. Refrigerator	May 6, 1873	18	6	3	499
145, 494	Duval, J., St. Joseph Parish, assignor to L. O. Thayer, Montreal, Canada. Breech-loading fire-arms	Dec. 16, 1873	412	136	4	643
139, 555	Duvall, L., assignor of one-half interest to A. T. Clark, Philadelphia, Pa. Apparatus for drying poudrette	June 3, 1873	94	32	3	616
	Dyar, N. A., Boston, Mass. Cement for roofing..... (Extension)	May 3, 1873			3	471
	Dyer, F., et al. (See Arey, R., assignor.)					
174, 267	Dyer, I. T., Canton, Mo. Combined over-bosom and collar	Nov. 4, 1873	83	27	4	485
141, 336	Dyer, J., Chicago, Ill. Ticket printing and registering apparatus	July 29, 1873	931	{ 303 304 305 }	4	120
136, 980	Dyke, L. J., Hamilton, N. Y. Cover for coffee-roasters.....	Mar. 18, 1873	563	187	3	309
134, 655	Dymond, J., New York, N. Y. Apparatus for treating cane-juice with sulphurous acid gas	Jan. 7, 1873	146	47	3	18
137, 538	Dyott, M. B., Philadelphia, Pa. Street-lamp	Apr. 8, 1873	243	75	3	388
142, 154	Eachus, J., Coatesville, Pa. Sawing-machine	Aug. 26, 1873	699	231	4	218
142, 378	Eads, J. B., Saint Louis, Mo. Bridge	Sept. 2, 1873	50	17	4	246
142, 379	Same.....Iron bridge.....	Sept. 2, 1873	51	18	4	246
142, 380	Same.....same.....	Sept. 2, 1873	53	18	4	246
142, 381	Same.....same.....	Sept. 2, 1873	55	18	4	246
142, 382	Same.....Iron bridge foundation.....	Sept. 2, 1873	57	19	4	246
144, 519	Same.....Bridge.....	Nov. 11, 1873	298	100	4	514
139, 127	Eagan, G. L., San Francisco, Cal. Composition for pavements	May 20, 1873	605		3	570
143, 448	Same.....Manufacture of pipe	Sept. 2, 1873	113		4	251
141, 126	Eagon, J., Batesville, Ohio. Ladder	July 22, 1873	719	239	4	95
	Eames, C. J. (See Eames, H. H. and C. J.)					
134, 983	Eames, C. J., New York, N. Y. Medicated paper.....	Jan. 21, 1873	457		3	72
137, 132	Eames, C. J., assignor to M. E. Smithe, New York, N. Y. Combustion-chamber for burning hydrocarbon vapor.....	Mar. 25, 1873	710	235	3	332
135, 976	Eames, F. W., Grand Rapids, Mich. Cut-off for fire-plug systems.....	Feb. 18, 1873	541	180	3	196
139, 556	Eames, H. H., Gold Hill, N. C. Apparatus for separating, concentrating, and amalgamating ores	June 3, 1873	95	32	3	617
139, 664	Eames, H. H. and C. J., New York, N. Y. Apparatus for treating ores, sulphurets, animal matter, paints, &c	June 10, 1873	205	67	3	642
142, 618	Eames, J. N., Wilmington, assignor to self, J. Wadsworth, Newton, and L. Turner, Reading, Mass. Lever for drawing framed timber together	Sept. 9, 1873	270	88	4	276
135, 897	Earickson, J. K., and J. R. Harris, Saint Louis, Mo. Shaping and arranging tobacco for packing	Feb. 18, 1873	481	155	3	191
136, 225	Same.....Apparatus for pressing and packing tobacco	Feb. 25, 1873	771	249	3	226
144, 076	Earl, G. W., New York, N. Y. Propeller for cars..... (Reissue.)	Oct. 28, 1873	648	213	4	461
	Earl, W., jr., et al. (See Fullam, A. J., assignor.)					
	Same..... (See Priest, J. K., assignor.)					
138, 868	Earle, A. I., Valley Falls, R. I. Stop-motion for drawing-frames, &c	May 13, 1873	366	114	3	537
139, 558	Same.....Bobbin.....	June 3, 1873	99	33	3	617
139, 378	Earle, J. E., assignor to Elm City Company, New Haven, Conn. Folding-guide for sewing-machines	May 27, 1873	835	268	3	596
146, 053	Earle, J. E., New Haven, Conn. Railway car window-screen	Dec. 30, 1873	938	302	4	708
142, 090	Earle, O. T., Norwalk, Conn. Beer-faucet	Aug. 26, 1873	646	212	4	214
142, 091	Same.....Direct-acting steam-pump.....	Aug. 26, 1873	647	212	4	214
142, 092	Same.....Attachment for direct-acting steam-pumps.....	Aug. 26, 1873	648	213	4	214
142, 093	Earle, O. T., Norwalk, Conn., and T. J. Rider, New York, N. Y. Mode of operating presses	Aug. 26, 1873	649	213	4	214
142, 562	Earle, O. T., Norwalk, Conn. Hand-lever attachment for steam-pumps.....	Sept. 9, 1873	225	73	4	272
145, 340	Earle, R. H., St. John's, Newfoundland. Ice-creeper	Dec. 9, 1873	275	92	4	620
142, 007	Earle, T., Valley Falls, R. I. Reciprocating churn-dasher	Aug. 19, 1873	547	181	4	197
	Earle, W., et al. (See Smith, R. T., assignor.)					
135, 209	Earley, E. S., Philadelphia, Pa. Refrigerator.....	Jan. 28, 1873	671	216	3	102
135, 210	Same.....Corpse-cooler.....	Jan. 28, 1873	672	217	3	102
140, 901	Earll, L. J., Union City, Pa. Curtain-fixture.....	July 15, 1873	499	168	4	68
135, 789	Early, J. F., Ruckersville, Va. Rotary steam-engine	Feb. 11, 1873	374	120	3	169
136, 226	Eason, B., Easonville, Ala. Rotary-churn	Feb. 25, 1873	772	250	3	226
144, 750	East, J. R., Fincastle, Tenn. Bee-hive	Nov. 18, 1873	502	170	4	542
5, 498	Easterly, J., Albany, N. Y., assignor to J. S. Perry, trustee and executor, and N. B. Perry, Base-burning stove	July 22, 1873	791	259	4	100
5, 627	Easterly, J., Detroit, Mich. Cooking-stove	Oct. 28, 1873	736	246	4	468
141, 127	Eastes, W. T., Summitville, Ind. Harvester-rake	July 22, 1873	720	{ 239 240 }	4	95
	Eastham, G. R. (See Sipe, L., assignor.)					
134, 984	Eastin, W. A., Henderson County, Ky. Corn-planter	Jan. 21, 1873	458	146	3	72
134, 527	Eastman, H. E., Green Bay, Wis. Exercising apparatus.....	Jan. 7, 1873	23	8	3	9
134, 740	Eastman, I. S., Madison, Wis. Rotary-fan	Jan. 14, 1873	233	75	3	39
145, 097	Eastman, J. H., Boston, Mass. Clasp.....	Dec. 2, 1873	55	17	4	590
142, 619	Eastman, W. W., and W. H. H. Morris, Meadville, Pa. Standard jack-post for drilling and pumping machinery	Sept. 9, 1873	271	89	4	276
	East New York Boot, Shoe and Leather Manufacturing Company. (See Ballou, C. C., assignor.)					
5, 576	Eaton & Cole. (See Snow, W. B., assignor.)					
	Eaton, C., New York, N. Y. Curtain-fixture..... (Reissue)	Sept. 23, 1873	779	269	4	338
	Eaton, D. L., et al. (See Etchell, S. W., assignor.)					
40, 259	Eaton, I. F., assignor to A. D. Davis, New York, N. Y. Toy automatic-swimmer	June 24, 1873	758	239	3	702

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
143,891	Eaton, I. F., assignor to self and E. Bolitho, Brooklyn, N. Y. Means for fastening buttons.	Oct. 21, 1873	167	157	4	436
143,892	Same.....Button-fastening.....	Oct. 21, 1873	468	157	4	436
143,449	Eaton, J., Atlanta, Ill. Siding-gage.	Sept. 2, 1873	114	36	4	251
143,971	Eaton, T. W., Chicago, Ill. Steam-elevator.	Oct. 28, 1873	555	184	4	454
	Eau Claire Lumber Company. (See Pond, L. W., assignor.)					
136,981	Eayrs, W. P., assignor of one-half interest to T. E. Stewart, Boston, Mass. Rotary-engine.	Mar. 18, 1873	563	{ 187 188 }	{ 3 4 }	309
141,128	Same.....same.....	July 22, 1873	721	240	4	95
140,260	Ebbitt, W., New York, N. Y. Car-brake.	June 24, 1873	759	240	3	702
140,902	Same.....Steam-nozzle.....	July 15, 1873	500	168	4	68
	Ebbs, W. F. (See Eckert, A. L., assignor.) (Reissue.)					
144,894	Ebeling, T., San Francisco, Cal. Spring-power.	Nov. 25, 1873	633	215	4	563
145,636	Eberly, D. B., Pine Village, Ind. Cultivator.	Dec. 16, 1873	541	{ 177 178 }	{ 4 5 }	653
142,008	Ebert, J. H., and E. Pitts, Decatur, Ill. Apparatus for steaming.	Aug. 19, 1873	548	181	4	197
134,790	Eby, H. H., Mendota, Ill. Cob-carrier for corn-shellers.	Jan. 14, 1873	277	90	3	42
138,489	Eby, P., and M. B. Fenninger, Kinzer's Post-Office, Pa. Insulator for telegraph-lines.	May 6, 1873	19	7	3	499
141,129	Eccles, J., Philadelphia, Pa., assignor to self and S. Eccles, jr., Baltimore, Md. Frictionless journal and shaft-bearing.	July 22, 1873	722	240	4	95
	Eccles, S., jr. (See Eccles, J., assignor.)					
	Same.....(See Thoms, J. B., assignor.)					
134,865	Eccleston, S. S., South New Berlin, N. Y. Lifting-jack.	Jan. 14, 1873	343	109	3	48
142,777	Eckel, G., Richmond, Ind. Stove-pipe holder.	Sept. 16, 1873	417	140	4	298
5,450	Eckert, A. L., Newark, N. J., assignor to W. F. Ebbs. Hand-punch. (Reissue.)	June 17, 1873	618	195	3	682
146,054	Eckstein, F., New York, N. Y. Cane.	Dec. 30, 1873	938	302	4	708
139,559	Eddy, G. W., Waterford, N. Y. Stop-cock.	June 3, 1873	100	34	3	617
140,407	Same.....Stop-valve.....	July 1, 1873	57	20	4	13
141,041	Same.....same.....	July 22, 1873	644	217	4	89
140,997	Eddy, L., Taunton, Mass. Knife.	July 22, 1873	607	204	4	86
135,211	Edgar, B., Espy, Pa. Washing-machine.	Jan. 28, 1873	673	{ 217 218 }	{ 3 4 }	102
142,844	Edgar, C., Dayton, Ohio. Horse hay-rake.	Sept. 16, 1873	469	159	4	302
145,852	Same.....Horse-rake.....	Dec. 23, 1873	736	241	4	681
136,982	Edgar, T. W., Espy, Pa. Means of snubbing canal-boats.	Mar. 18, 1873	565	188	3	309
	Edge, J. S., jr. (See Deeley & Edge.)					
143,450	Edge, W. C., Newark, N. J. Wire-fabric.	Sept. 2, 1873	115	36	4	251
143,503	Same.....Manufacture of watch-chains and bracelets.	Oct. 7, 1873	89	30	4	388
137,900	Edgell, F., Buffalo, N. Y. Pen and pencil case.	Apr. 15, 1873	570	179	3	428
137,425	Edgerton, H. H., Fort Wayne, Ind. Sealing dip-pipes in gas works.	Apr. 1, 1873	129	42	3	367
	Edison, T. A. (See Pope & Edison.) (Reissue.)					
5,519	Edison, T. A., Newark, N. J., assignor by mesne assignment to the Gold and Stock Telegraph Company, New York, N. Y. Printing-telegraph. (Reissue.)	Aug. 5, 1873	183	58, 59	4	1.0
134,866	Edison, T. A., Newark, N. J. Printing-telegraph instrument.	Jan. 14, 1873	344	109	3	48
134,867	Edison, T. A., Newark, N. J., assignor to self and G. Harrington, Washington, D. C. Automatic telegraph-instrument.	Jan. 14, 1873	345	110	3	48
134,868	Same.....Electro-magnetic adjuster.....	Jan. 14, 1873	346	110	3	48
135,531	Same.....Circuit for chemical-telegraphs.....	Feb. 4, 1873	125	40	3	137
138,869	Edison, T. A., Newark, N. J. Printing-telegraph.	May 13, 1873	367	114	3	537
138,870	Edison, T. A., Newark, N. J., assignor to the Gold and Stock Telegraph Company, New York, N. Y. Printing-telegraph.	May 13, 1873	368	114	3	538
139,128	Same.....same.....	May 20, 1873	605	189	3	570
139,129	Same.....same.....	May 20, 1873	606	190	3	570
140,487	Same.....same.....	July 1, 1873	121	41, 42	4	18
140,488	Same.....same.....	July 1, 1873	122	42	4	18
140,489	Same.....Circuit for printing-telegraphs.....	July 1, 1873	124	43	4	18
141,772	Edison, T. A., Newark, N. J. Circuit for automatic or chemical telegraphs.	Aug. 12, 1873	331	108	4	170
141,773	Edison, T. A., Newark, N. J., assignor to self and G. Harrington, Washington, D. C. Circuit for automatic-telegraphs.	Aug. 12, 1873	331	109	4	170
141,774	Same.....Chemical-telegraphs.....	Aug. 12, 1873	332	109	4	170
141,775	Same.....Perforator for automatic-telegraphs.....	Aug. 12, 1873	333	109	4	170
141,776	Same.....Circuit for automatic-telegraphs.....	Aug. 12, 1873	334	110	4	170
141,777	Same.....Relay-magnet.....	Aug. 12, 1873	335	110	4	170
142,688	Edison, T. A., Newark, N. J., assignor to the Gold and Stock Telegraph Company, New York, N. Y. Electric-regulator for transmitting-instruments.	Sept. 9, 1873	327	109	4	280
142,999	Edison, T. A., Newark, N. J. Galvanic-battery.	Sept. 23, 1873	605	205	4	324
141,211	Edmands, A. B., Saugus, Mass. Eyelet-setting machinery.	July 29, 1873	815	267	4	110
143,680	Edmonds, G., New Orleans, La. Car-coupling.	Oct. 14, 1873	261	86	4	410
141,498	Edmonston, R. A., Georgetown, D. C. Scaffold-support.	Aug. 5, 1873	80	25	4	141
143,751	Edson, J., Boston, Mass. Pump.	Oct. 21, 1873	348	116	4	427
145,731	Edson, J., assignor of one-half interest to J. Clark, Boston, Mass. Hose-coupling.	Dec. 23, 1873	636	208	4	673
145,495	Edson, J. B., Brooklyn, N. Y. Recording steam-gage.	Dec. 16, 1873	414	136	4	643
139,560	Edson, W., assignor to American Stop-Motion Company, Boston, Mass. Stop-mechanism for looms.	June 3, 1873	102	34	3	617
139,501	Edward, M. L., Salem, Ohio. Cutter for meat and vegetables.	June 3, 1873	51	16	3	613
	Edwards, A. (See Andrews, A. F., assignor.)					
	Edwards, A. (See Wylé, J. H., assignor.)					
134,528	Edwards, A., New Haven, Conn., assignor to A. R. Edwards, Chicago, Ill. Fruit-drier.	Jan. 7, 1873	24	8	3	9
134,529	Same.....Lumber-drier.....	Jan. 7, 1873	25	8	3	9
135,324	Same.....Apparatus for treating offal.	Jan. 28, 1873	775	251	3	110
	Edwards, A. R. (See Edwards, A., assignor.)					
145,098	Edwards, C. E., assignor to S. S. White, Philadelphia, Pa. Dental drilling-machine.	Dec. 2, 1873	56	17	4	590
142,155	Edwards, C. H., assignor to L. C. Boyington, Chicago, Ill. Gas-regulator.	Aug. 26, 1873	700	231	4	218
136,047	Edwards, D., Melbourne, Victoria. Cultivator.	Feb. 18, 1873	604	199	3	201
136,144	Edwards, E., London, England. Machine for mixing and kneading dough.	Feb. 25, 1873	711	{ 229 230 }	{ 3 4 }	221
142,383	Edwards, F. C., Chicago, Ill. Cut-off nozzle for drawing liquor.	Sept. 2, 1873	58	19	4	246
5,342	Edwards, G. A., and G. Schieder, Syracuse, N. Y. Shuttle for sewing-machine. (Reissue.)	Apr. 1, 1873	226	69	3	375
5,436	Same.....same.....	June 3, 1873	185	60	3	624
136,311	Same.....same.....	Feb. 25, 1873	847	273	3	231
	Edwards, G. B., et al. (See Culmer, J. W., assignor.)					
	Edwards, G. W., et al. (See Hetlinger, A., assignor.)					
139,710	Edwards, J., New York, N. Y. Match-plane.	June 10, 1873	255	80	3	645
134,869	Edwards, J. L., Cochranville, Pa. Folding feed-box.	Jan. 14, 1873	346	110	3	48
137,602	Edwards, W., Cleveland, Ohio. Folding ironing-table.	Apr. 8, 1873	299	92	3	393

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Page.	
138, 621	Edwards, W. C., West Winsted, Conn. Water-wheel	May 6, 1873	133	44	3	508
135, 532	Egan, G. A., Covington, Ky. Stock-car	Feb. 4, 1873	126	40	3	137
138, 321	Egan, K., New York, N. Y. Folding-seat for street-railway car	Apr. 29, 1873	987	310	3	479
145, 853	Egbert, F. L., executrix. (See Barnes, S. H.)					
142, 778	Egge, F., assignor of one-half interest to F. W. Smith, Bridgeport, Conn. Padlock	Dec. 23, 1873	738	241	4	681
5, 466	Egger, F. J., Springfield, Ohio. Carpet-rag looper	Sept. 16, 1873	418	141	4	298
135, 638	Eggleston, J. S., Auburn, assignor by mesne assignment of one-half interest to E. H. Kellogg, New York, N. Y. Lubricating-axle for vehicles	June 24, 1873	841	266	3	709
135, 100	Egleston, C. H., Marshall, Mich. Truss	Feb. 11, 1873	240	75	3	158
144, 520	Egley, J. C., Philadelphia, Pa. Sewing-machine cover-hook	Jan. 21, 1873	555	181	3	80
137, 426	Ehrenberg, T., New York, N. Y. Ribbon-block	Nov. 11, 1873	300	101	4	514
145, 791	Eichenberger, J. R., and C. G. Binkly, Burton City, Ohio. Nut-lock	Apr. 1, 1873	131	42	3	367
135, 033	Eichholtz, G. W., New Berlin, Ill. Fly-trap	Dec. 23, 1873	686	225	4	677
138, 622	Eickemeyer, R., Yonkers, N. Y. Machine for stretching hat-bodies	Jan. 21, 1873	505	163	3	76
138, 871	Same.....Steam-pump	May 6, 1873	134	44	3	508
139, 379	Same.....Hat-press	May 13, 1873	369	115	3	538
	Same.....Mechanical movement	May 27, 1873	836	268	3	596
140, 335	Same.....Hat-press	June 24, 1873	829	263 264 265	3	708
140, 903	Same.....Hat-stretching machine	July 15, 1873	500	168 169	4	68
141, 337	Same.....same	July 22, 1873	935	305	4	120
141, 338	Same.....Expansible hat-block	July 29, 1873	937	305	4	120
141, 339	Same.....Machine for lustering hats	July 29, 1873	939	306	4	120
144, 841	Same.....Fulling-mill	Nov. 25, 1873	590	201 202	4	560
145, 934	Same.....Machine for ironing hats	Dec. 30, 1873	831	271	4	699
142, 384	Eighme, D., Chicago, Ill. Harness-maker's clamp	Sept. 2, 1873	59	19	4	247
138, 742	Eisenmann, J., Chicago, Ill. Machine for boring hubs	May 13, 1873	257	80	3	528
145, 935	Eisman, C. D. B. (See Griffith & Miller, assignors.)					
	Elam, W. P., assignor of one-half interest to J. H. Wilcox, Petersburg, Ill. Top-prop for carriages	Dec. 30, 1873	835	272	4	699
134, 870	Elbreg, G., Brazil, Ind. Machine for mining coal	Jan. 14, 1873	347	110 111	3	48
140, 689	Elder, D. D., Philadelphia, Pa. Show-case	July 8, 1873	308	105	4	45
135, 212	Elder, J. F., Blairsville, Pa. Railway-car brake	Jan. 28, 1873	675	218	3	102
138, 872	Elder, J. M., and P. A. Bishop, Elyria, Ohio. Safety-bridle	May 13, 1873	371	115	3	538
141, 548	Elderfield, F. D., Saint Louis, Mo. Sectional adjustable slotted-cam	Aug. 5, 1873	121	38	4	145
136, 823	Eldredge, J. V. D., Detroit, Mich. Sewing-machine	Mar. 18, 1873	435	144	3	299
142, 689	Same.....Hemmer for sewing-machines	Sept. 9, 1873	328	109	4	280
136, 426	Eldridge, D. D., La Fayette, Ind. Railway-rail chair	Mar. 4, 1873	61	22	3	250
140, 817	Elkins, W. L., Philadelphia, Pa. Paint for oil-barrels, &c.	July 15, 1873	426	.....	4	62
144, 521	Elkinton, T., Philadelphia, Pa. Canopied chair	Nov. 11, 1873	300	101	4	514
	Ellacott, J. P. (See Simpson & Ellacott.)					
143, 972	Elling, C. (See Doll & Elling.)					
136, 227	Elliot, A., and J. O. Woodward, Taunton, Mass. Brick-machine	Oct. 28, 1873	556	185	4	454
5, 577	Elliot, G., Saint Louis, Mo. Railway-crossing	Feb. 25, 1873	773	250	3	226
	Elliot, W. H., Plattsburgh, assignor to E. Remington & Sons, Ilion, N. Y. Patched cart-ridge					
144, 193	Elliot, E. H., Charlestown, Mass. Carriage-cover	Sept. 23, 1873	780	269	4	338
136, 048	Elliot, G. R., assignor to self and F. Morrill, Boston, Mass. Game-board	Nov. 4, 1873	20	6	4	480
144, 966	Elliot, J., J. P. Harrington, and W. R. Davenport, assignors to Erie Car Works, Erie, Pa. Dumping-car	Feb. 18, 1873	604	199	3	201
140, 904	Elliot, J. F., Forest, Ill. Siding-hook	Nov. 25, 1873	692	234	4	569
5, 401	Elliot, J. S., Chelsea, Mass., assignor to Union Stone Company. Machine for forming building-blocks	July 15, 1873	503	169	4	68
137, 901	Same.....Mold for casting molds	May 13, 1873	453	143	3	545
138, 743	Elliot, J. S., Chelsea, Mass. Machine for sharpening harvester-knives	Apr. 15, 1873	571	179	3	428
140, 490	Elliot, O. V., Mansfield, Pa. Boot-tree	May 13, 1873	258	80	3	528
138, 385	Elliot, W. B., Corning, N. Y. Stove-pipe shelf	July 1, 1873	125	43	4	18
139, 885	Elliot, W. H., Ilion, N. Y. Cartridge-box	Apr. 29, 1873	1, 036	326	3	483
	Ellis, A., et al. (See Jackson, L. G., assignor.)	June 17, 1873	422	131	3	666
136, 645	Ellis, B. F., Newton, Pa. Toy-puzzle	Mar. 11, 1873	274	92	3	276
141, 549	Ellis, C., G. W., and J. D., Philadelphia, Pa. Box-scraper	Aug. 5, 1873	121	38	4	145
	Ellis, C. A. (See Skidmore, W. H., assignor.)					
	Ellis, C. H. (See Hale & Ellis.)					
	Ellis, G. W. (See Ellis, C., G. W., and J. D.)					
5, 539	Ellis, G. W., Lynn, Mass., assignor by mesne assignment to J. W. Brooks, trustee. Machine for punching the lifts of boots and shoes	Aug. 19, 1873	616	203	4	202
5, 413	Ellis, G. W., and C. W. Glidden, Stoneham, Mass., assignors by mesne assignment to J. W. Brooks, trustee. Machinery for attaching heels to boots and shoes and polishing the same	May 20, 1873	696	218 219	3	577
136, 459	Ellis, H. A., Springfield, Mass. Hemmer for sewing-machines	Mar. 4, 1873	124	40	3	255
	Ellis, H. R. (See Leach, S. L., assignor.)					
140, 491	Ellis, J., and N. Hoffman, East Coventry, and J. Lee, Pottstown, Pa. Thrashing-machine	July 1, 1873	125	43	4	18
139, 130	Ellis, J. A. H., assignor to Co-operative Manufacturing Company, Springfield, Vt. Doll-joint	May 20, 1873	607	190	3	570
142, 217	Ellis, J. B., Washington, D. C. Filter	Aug. 26, 1873	749	247	4	222
	Ellis, J. D. (See Ellis, C., G. W., and J. D.)					
145, 160	Ellis, J. M., assignor to Doolittle Manufacturing Company, Bridgeport, Conn. Coil-spring garter and belt	Dec. 2, 1873	113	37	4	594
143, 893	Ellis, J. W., Camden, N. J. Turning-tool	Oct. 21, 1873	468	157	4	436
145, 995	Ellis, R. J., Liverpool, England. Tubular fire-bar and connecting-bearing	Dec. 30, 1873	885	287	4	703
137, 539	Ellis, S. K., Waltham, Mass. Clasp for stocking-supporters	Apr. 8, 1873	244	75	3	388
138, 012	Ellis, W. C., Worcester, Mass. Piano-forte bridge	Apr. 22, 1873	680	215	3	446
144, 842	Same.....Piano-string bridge	Nov. 25, 1873	593	202	4	560
5, 540	Ellis, Z., Philadelphia, Pa. Anchor for securing cores	Aug. 19, 1873	618	204	4	202
6, 988	Ellison, A. S., New York, N. Y. Collarette	Nov. 11, 1873	.....	.....	4	504
144, 077	Ellison, J. C., assignor to self and D. N. Rothermel, Philadelphia, Pa. Loom for weaving pile-fabrics	Oct. 28, 1873	649	214	4	461
142, 094	Elliston, C. T., Clinton, Mo. Rotary-plow	Aug. 26, 1873	649	213	4	214
137, 665	Ells, C. W., Bridgeport, Conn. Shuttle for sewing-machines	Apr. 8, 1873	353	109	3	397
136, 824	Ells, G. F., Deposit, N. Y. Chair-brace	Mar. 18, 1873	435	144	3	299
144, 194	Ellsworth, E. W., South Windsor, Conn. Tobacco-drying house	Nov. 4, 1873	21	6	4	480

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 646	Ellwood, M., Girard, Ohio. Indicator and low-water alarm for boilers	Mar. 11, 1873	275	92	3	276
	Elm City Company. (See Crosby & Kellogg, assignors)..... (Reissue.)					
	Same..... (See Earle, J. E., assignor.)					
139, 459	Elmer, E. S., Hudson, N. Y. Metallic hose-coupling	June 3, 1873	15	5	3	610
141, 499	Elmer, H. O., Sand Bank, N. Y. Fence-post.....	Aug. 5, 1873	80	25	4	141
5, 283	Elmer, W., New York, N. Y. Gasifying fuel for heating, &c	Feb. 18, 1873	672		3	206
5, 284	Same..... Manufacture of inflammable gases for fuel, &c	Feb. 18, 1873	674		3	206
141, 500	Same..... Manufacture of illuminating gas.....	Aug. 5, 1873	81		4	141
	Elmer, W. F. (See Warfield & Elmer.)					
137, 666	Elmer, W. H., Berlin, Wis. Turbine water-wheel.....	Apr. 8, 1873	354	109	3	397
144, 195	Elmslie, G., Toronto, Canada. Car-wheel.....	Nov. 4, 1873	22	6	4	480
138, 744	Elsaesser, M., Brooklyn, N. Y. Rotary-engine.....	May 13, 1873	259	80	3	528
135, 790	Else, G., Sterling, Ill. Harness and saddle pad	Feb. 11, 1873	375	120	3	169
138, 140	Same..... Wash-board.....	Apr. 22, 1873	790	252	3	455
144, 967	Same..... Stove-pipe stretcher, &c.....	Nov. 25, 1873	693	234	4	569
136, 228	Elston, W. H., Marshall, Mich. Carbureter	Feb. 25, 1873	774	250	3	226
143, 443	Eltonhead, G. W., assignor to self and W. Gerkhardt, Saint Louis, Mo. Stove-grate	Oct. 7, 1873	40	14	4	384
141, 863	Elward, J. H., Saint Paul, Minn. Harvester.....	Aug. 19, 1873	426	140	4	187
141, 864	Elward, J. H., Polo, Ill. same	Aug. 19, 1873	427	140	4	187
				141		
141, 65	Elward, J. H., Saint Paul, Minn. same	Aug. 19, 1873	429	141	4	187
141, 866	Same	Aug. 19, 1873	431	141	4	187
141, 867	Same	Aug. 19, 1873	433	141	4	187
141, 868	Elward, J. H., assignor to Saint Paul Harvester Works, Saint Paul, Minn. Harvester	Aug. 19, 1873	434	142	4	187
136, 049	Elwell, H. H., assignor to Norwalk Lock Company, South Norwalk, Conn. Door-lock	Feb. 18, 1873	606	199	3	201
143, 451	Same..... Door-knob	Sept. 2, 1873	115	37	4	252
140, 353	Elwood, R., and R. L. Pitcher, Sycamore, Ill. Cultivator	July 1, 1873	17	5, 6	4	9
134, 530	Ely, C. L., Branford, Conn. Music-rack	Jan. 7, 1873	26	8	3	9
	Ely, E. A. (See Hopping, E. C., assignor.)					
142, 156	Ely, F. W., Du Luth, Minn. Picture-hanger	Aug. 26, 1873	701	231	4	218
	Ely, W. G. (See Walker, G. A., assignor)..... (Reissue.)					
	Elzenhaefer, G. (See Van Kannel & Elzenhaefer.)					
140, 690	Emerick, F., New York, N. Y. Gearing	July 8, 1873	309	105	4	45
137, 833	Emerson, D. L., Oakland, Cal. Construction of houses	Apr. 15, 1873	512	160	3	423
138, 236	Emerson, J. E., Beaver Falls, Pa. Saw-teeth	Apr. 29, 1873	901	284	3	472
142, 779	Same..... Saw-swage	Sept. 16, 1873	418	141	4	298
142, 780	Same..... Blank for saw-teeth	Sept. 16, 1873	419	141	4	298
142, 781	Same..... Saw-teeth	Sept. 16, 1873	420	141	4	298
136, 647	Emerson, R., Rockford, Ill. Colter	Mar. 11, 1873	276	92	3	276
141, 042	Emerson, S. F., Akron, Ohio. Sharpening-machine	July 22, 1873	645	217	4	89
138, 873	Emerson, W. P., Pleasantville, Ky. Horse-power	May 13, 1873	372	116	3	538
	Emery, A. D. (See Cooper & Emery.)					
143, 562	Emery, A. G., South Boston, Mass. Wash-bench	Oct. 14, 1873	156	52	4	402
139, 052	Emery, C. E., New York, N. Y. Compound steam-engine.....	May 20, 1873	528	167	3	564
143, 681	Emery, E. E., Boston, Mass. Gage for marking cloth for cutting	Oct. 14, 1873	252	87	4	410
	Emery, G. D. (See McCollum & Emery.)					
142, 218	Emery, S., Cameron, Mo. Earth-auger	Aug. 26, 1873	751	248	4	223
136, 145	Emery, T., Peshtigo, Wis. Device for rolling logs	Feb. 25, 1873	712	230	3	221
134, 871	Emig, G., Cincinnati, Ohio. Screw-cutting machine	Jan. 14, 1873	348	111	3	48
	Emley, F. (See Rood, D., assignor.)					
	Emmeluth, E. P. (See Hunt, C. F., assignor.)					
138, 997	Emmert, J., Chicago, Ill. Stove-pipe damper	May 20, 1873	485	153	3	560
138, 322	Emory, I. J., jr., Webster, Ohio. Scrubber.....	Apr. 29, 1873	988	310	3	479
135, 414	Emrick, L., Vernon, Mich. Corn-cultivator.....	Feb. 4, 1873	19	6	3	129
139, 557	En-Earl, G., Boston, Mass., assignor to Automatic Car-Brake Manufacturing Company, New York, N. Y. Automatic railway car-brake	June 3, 1873	97	33	3	617
138, 386	Enell, C. A., Philadelphia, Pa. Boat-detaching apparatus	Apr. 29, 1873	1, 036	326	3	483
136, 983	Engel, S., Chicago, Ill. Safety-pocket	Mar. 18, 1873	566	188	3	309
144, 522	Engelman, J. J., Chillicothe, Mo. Saw-filing machine.....	Nov. 11, 1873	301	101	4	514
5, 486	Engelmann, H., Salt Lake City, Utah. Process of making coke from lignites, &c. (Re-issue).....	July 15, 1873	588	198	4	75
136, 592	Same..... Process for making coke from lignites.....	Mar. 11, 1873	230	77	3	273
141, 778	Same..... Coking-furnace.....	Aug. 12, 1873	335	110	4	170
				111		
141, 779	Same..... same.....	Aug. 12, 1873	338	111	4	170
144, 022	Engelsman, G., New York, N. Y. Extension-trunk.....	Oct. 28, 1873	604	200	4	458
144, 603	Enger, J., Portland, Me. Tilting-chair	Nov. 18, 1873	378	127	4	532
145, 341	England, M., New York, N. Y. Inking apparatus for printing-presses.....	Dec. 9, 1873	276	92	4	620
	English, J., et al. (See Newton, J. M., assignor.)					
135, 898	English, T., Dulwich, England. Screw bolt and nut.....	Feb. 18, 1873	482	156	3	191
142, 620	English, W. J., Providence, R. I. Combined water cooler and filter	Sept. 9, 1873	272	89	4	276
	Enoch, A. I., et al. (See Skinner, H. M., assignor.)					
	Enoch, J., et al. (See Ross, L. E., assignor.)					
143, 894	Enos, J., Chicago, Ill. Car-coupling	Oct. 21, 1873	470	158	4	436
	Enos, J. A. (See Gardner & Enos.)					
138, 874	Enos, J. A., Peabody, Mass., assignor to J. M. Caller, trustee. Leather-dressing machine	May 13, 1873	372	116	3	538
				117		
139, 131	Enos, J. A., assignor of three-fourths interest to G. Holman, G. Plumer, and J. O. Whitten, Peabody, Mass. Gas purifier and regulator	May 20, 1873	607	190	3	570
142, 219	Enos, J. M., St. Joseph, Mich. Car-coupling	Aug. 26, 1873	751	248	4	223
140, 261	Enos, L. S., assignor of one-half interest to S. B. Estabrook, Almond, N. Y. Wash-pounder	June 24, 1873	760	240	3	702
143, 130	Enos, L. S., assignor to self and S. B. Estabrook, Almond, N. Y. Feather renovator.....	Sept. 23, 1873	709	243	4	332
135, 101	Enright, J., Cleveland, Ohio. Turn-table	Jan. 21, 1873	556	181	3	80
	Enterprise Manufacturing Company. (See Baker, J. G., assignor.)					
	Same..... same..... (Design.)					
145, 161	Entrekin, W. G., Philadelphia, Pa. Burnisher for photographs.....	Dec. 2, 1873	114	37	4	594
139, 132	Entrekin, W. G., and J. Bramble, jr., Philadelphia, Pa. Burnishing-press for photographs.....	May 20, 1873	608	190	3	570
	Entwistle, T. C. (See Follensbee & Entwistle.)					
139, 380	Epler, P., Colomsville, assignor of one-half interest to J. Zerbe, Limestone Township, Pa. Neck-yoke	May 27, 1873	839	268	3	597
136, 312	Eppinger, L., New York, N. Y. Manufacture of plug and bunch tobacco	Feb. 25, 1873	848	274	3	231
140, 020	Same..... Plug and bunch tobacco	June 17, 1873	532	168	3	675
	Erbacher, J., et al. (See Giebrich, L., assignor.)					
141, 430	Erbe, B., Pittsburgh, Pa. Reversible knob-latch	Aug. 5, 1873	18	5	4	136
140, 905	Erdmann, J. F. W., Philadelphia, Pa. Cutter-head	July 15, 1873	503	169	4	68

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146, 055	Eriessson, J., assignor to C. H. Delamater and G. H. Robinson, New York, N. Y. Air-compressing apparatus.....	Dec. 30, 1873	939	303	4	708
	Erie Car-Works. (See Elliott, Harrington & Davenport, assignors.)					
141, 431	Erikson, J., Madison, Wis. Baby-walker.....	Aug. 5, 1873	19	5	4	136
	Ermentrout, H. Z. (See Smith, W. M., assignor.)					
136, 229	Ernst, A., Baltimore, Md. Revivifying charcoal used in rectifying spirits.....	Feb. 25, 1873	775	.....	3	226
133, 797	Ernst, G. W., and I. Lucas, Fremont, Ohio. Fly-trap.....	May 13, 1873	305	94	3	532
140, 125	Ernst, J. G., assignor of two-thirds interest to T. H. Denison, Baltimore, Md., and A. J. Fisher, New York, N. Y. Ruler.....	June 24, 1873	647	203	3	692
140, 906	Ernst, T., Fort Madison, Iowa. Cigar-machine.....	July 15, 1873	504	{ 169 170 }	{ 4 4 }	{ 68 68 }
140, 021	Errani, L. C., and R. Anders, Liege, Belgium. Dynamic machine.....	June 17, 1873	533	168	3	675
135, 533	Ertel, G., Quincy, Ill. Beater and compressing press.....	Feb. 4, 1873	127	40, 41	3	137
143, 814	Ertola, B., and A. Caselli, New York, N. Y. Machine for forming hat-frames.....	Oct. 21, 1873	402	134	4	431
141, 212	Erwin, J. B., Batavia, N. Y. Water-elevator.....	July 29, 1873	819	{ 267 268 }	{ 4 4 }	{ 110 110 }
136, 368	Erwin, J. B., and G. H. Shoulters, Batavia, N. Y. Water-elevator.....	Mar. 4, 1873	13	5	3	246
144, 523	Estersky, T., St. Petersburg, Russia. Calculating-machine.....	Nov. 11, 1873	302	102	4	514
	Esmond, E. R. (See Martin, B. G., assignor.)					
5, 613	Esmond, R., New York, N. Y., assignor to United Power-Press Company. Press. (Reissue).	Oct. 21, 1873	518	174	4	440
142, 220	Same.....same.....	Aug. 26, 1873	752	248	4	223
144, 968	Espalla, J., Mobile, Ala. Center-board for vessels.....	Nov. 25, 1873	694	234	4	569
135, 192	Espey, R., Saint Louis, Mo. Spring for doors, gates, &c.....	Jan. 21, 1873	632	206	3	86
	Esser, H. (See Kenuffel & Esser.)					
136, 146	Essex, D., New York, N. Y. Child's table napkin holder and clasp.....	Feb. 25, 1873	713	230	3	221
140, 617	Essex, H., Meadville, Pa. Padlock.....	July 8, 1873	252	85	4	40
144, 524	Same.....Machine for dressing metal cocks.....	Nov. 11, 1873	363	102	4	514
140, 691	Essick, S. V., Alliance, assignor of two-thirds interest to G. W. Raff, Canton, and H. C. Hedges, Mansfield, Ohio. Knitting-machine.....	July 8, 1873	309	106	4	45
138, 623	Essig, O. A., Canton, Ohio. Hollow auger.....	May 6, 1873	136	44	3	509
135, 415	Estabrook, A. C., assignor to The Florence Manufacturing Company, Florence, Mass. Manufacture of brushes.....	Feb. 4, 1873	20	6	3	129
	Estabrook, E. (See Blaisdell & Estabrook.)					
	Estabrook, S. B. (See Enos, L. S., assignor.)					
135, 534	Estell, S. F., Chicago, Ill., assignor to A. W. Kendrick, Brooklyn, N. Y., and H. Ogborn, Richmond, Ind. Animal-trap.....	Feb. 4, 1873	129	41	3	137
143, 230	Estell, S. F., Chicago, Ill. Programme-clock.....	Sept. 30, 1873	798	275	4	355
137, 188	Estes, S., Newburyport, Mass. Loom take-up mechanism.....	Mar. 25, 1873	761	251	3	336
143, 279	Estes, W. A., China, Me. Plow.....	Sept. 30, 1873	839	289	4	359
	Estey, J., & Co. (See Fuller, L. K., assignor.)					
	Same.....same.....(Design.)					
	Same.....(See Hayward, S., assignor.).....(Design.)					
134, 872	Etchell, S. W., assignor to self and D. L. Eaton, Weatherly, and A. E. Allen, Philadelphia, Pa. Process of hardening steel.....	Jan. 14, 1873	349	.....	3	48
5, 277	Ettenborough, J. S., Easton, Pa. Tool-holder for slotting-machines.....(Reissue)	Feb. 11, 1873	450	146	3	174
	Eurgens, A. (See Kingman & Eurgens.)					
134, 791	Evans, D. L. (See Hatfull, R., assignor.)					
134, 792	Evans, F., New York, N. Y. Treating damaged coffee.....	Jan. 14, 1873	278	.....	3	42
143, 815	Same.....same.....	Jan. 14, 1873	278	.....	3	42
	Evans, H. S., deceased, by J. D. Evans, executrix, West Chester, Pa. Automatic railway-signal.....	Oct. 21, 1873	404	134	4	431
135, 102	Evans, J., Portsmouth, Ohio. Machine for cold-rolling sheet-metal.....	Jan. 21, 1873	556	181	3	80
139, 305	Evans, J., Rosenhayn, N. J. Treadle-movement.....	May 27, 1873	782	248	3	592
	Evans, J. D., executrix. (See Evans, H. S.)					
145, 996	Evans, J. H., Dallas, Ky. Fence machine.....	Dec. 30, 1873	885	287	4	703
141, 340	Evans, J. W., New York, N. Y. Means of propelling vessels.....	July 29, 1873	942	306	4	120
144, 751	Same.....Girder for bridges.....	Nov. 18, 1873	502	170	4	542
135, 213	Evans, O., Saint Paul, Minn. Alarm, and lubricating device for car-axle boxes.....	Jan. 28, 1873	676	218	3	102
136, 825	Evans, O. B., Titusville, Pa. Washing-machine.....	Mar. 18, 1873	437	145	3	299
143, 816	Evans, P., New York, N. Y. Grinding mill.....	Oct. 21, 1873	404	135	4	431
144, 196	Evans, R. M., Buffalo, N. Y. Consecutive-number printer.....	Nov. 4, 1873	22	6	4	480
	Evans, T., Branchport, N. Y. Metallic ear for attaching handles to pails and like vessels.....(Extension)	June 21, 1873	.....	.....	3	662
5, 578	Same.....Metallic pail-ear.....(Reissue)	Sept. 23, 1873	781	269	4	338
141, 550	Evans, T. R., Philadelphia, Pa. Boot and shoe tree and stretcher.....	Aug. 5, 1873	122	38	4	145
144, 969	Evans, W., Long Island City, N. Y. Machine for forging hammers.....	Nov. 25, 1873	694	234	4	569
	Evans, W. J. (See Thomas & Evans.)					
139, 502	Evans, W. J., and W. Perry, New York, N. Y. Kettle.....	June 3, 1873	52	16	3	613
	Evans, W. N. (See Rawle & Evans.)					
143, 131	Evard, C. E., Leesburgh, Va. Watchmakers' chain-clamp.....	Sept. 23, 1873	710	244	4	332
142, 221	Evard, M., St. Etienne, France. Apparatus for washing coal, ore, &c.....	Aug. 26, 1873	753	248	4	223
	Evarts, C., administratrix. (See Evarts, M.)					
444, 078	Evarts, J. A., assignor to Bradley & Hubbard, West Meriden, Conn. Suspension-pulley.....	Oct. 28, 1873	651	214	4	461
145, 637	Same.....Slide-pendant for hanging lamps.....	Dec. 16, 1873	542	178	4	653
5, 395	Evarts, J. A., and P. Cinquini, assignors to Bradley & Hubbard, West Meriden, Conn. Drawer-pull label-holder.....(Reissue)	May 6, 1873	239	74	3	517
140, 907	Evarts, J. M., New Haven, Conn. Filter.....	July 15, 1873	505	170	4	69
135, 416	Evarts, M., deceased, by C. Evarts, administratrix, Girard Township, Pa. Machine for making dowel-pins.....	Feb. 4, 1873	22	6	3	129
137, 766	Even, H., Pekin, Ill. Manufacture of sweet biscuit.....	Apr. 15, 1873	455	.....	3	418
	Evenden, J. G. (See Wilson, F. G., assignor.)					
5, 597	Evenden, J. G., Chicago, Ill. Oil-can.....(Reissue)	Oct. 14, 1873	322	107	4	414
5, 598	Same.....Can for oils, &c.....(Reissue)	Oct. 14, 1873	322	107	4	414
5, 599	Same.....Sheet-metal can.....(Reissue)	Oct. 14, 1873	323	107	4	414
140, 022	Evenden, J. G., assignor to self and F. C. Wilson, Chicago, Ill. Apparatus for drawing oil from cans.....	June 17, 1873	534	169	3	675
144, 268	Evered, J., assignor to self and J. Davis, Muskegon, Mich. Balanced slide-valve.....	Nov. 4, 1873	84	27	4	485
	Everett, C. D. (See Parmalee & Johns, assignors.)					
138, 624	Everett, C. D., Cleveland, Ohio. Felly-plate.....	May 6, 1873	137	45	3	509
139, 949	Everitt, J. M., Hackettstown, N. J. Gauge for horse-collars.....	June 17, 1873	474	149	3	670
141, 130	Everson, O. J., Lake City, Minn. Grain-separator.....	July 22, 1873	724	241	4	95
136, 313	Evert, C. L., Washington, D. C., and A. Johnson, New York, N. Y. Street letter-box.....	Feb. 25, 1873	849	274	3	232
144, 326	Evinger, N., Sanford, Ind. Thread-cutter for sewing-machine.....	Nov. 4, 1873	128	43	4	489
	Ewing, J. F. (See Bingham & Ewing.)					

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137, 902	Excelsior Needle Company. (See Dayton, W. H., assignor.)	Apr. 15, 1873	572	179	3	428
137, 427	Exner, W., Harper's Ferry, W. Va. Wash-boiler	Apr. 1, 1873	131	43	3	367
143, 000	Eynon, D., Saint Louis, Mo. Spike-making machine	Sept. 23, 1873	606	205	4	324
	Eyrse, J. H., Pekin, Ill. Street-lamp					
	Ezekiel, H. C. (See Templeton, N. J., assignor.)					
	Faber, E. (See Schrag & Hufeland, assignors) (Reissue.)					
	Same. (See Warth, A., assignor) (Reissue.)					
139, 306	Faber, H. C., Utica, N. Y. Trunk-catch	May 27, 1873	782	248	3	592
140, 023	Fabré, J. M., Bordeaux, France. Bridle-bit	June 17, 1873	535	169	3	675
143, 905	Fachs, H., New York, N. Y. Table-caster	Sept. 16, 1873	517	176	4	506
138, 387	Fagaines, G. W., assignor of one-half interest to J. Cotner, Shelby, Ohio. Washing-machine	Apr. 29, 1873	1,037	327	3	483
6, 488	Fagan, G. R., Philadelphia, Pa. Ornamentation (Design)	Mar. 4, 1873			3	245
135, 325	Fagan, M. G., assignor to self and A. C. Corse, Troy, N. Y. Cooking-stove	Jan. 28, 1873	777	251	3	110
	Fagin, L., trustee. (See Bickford, H., assignor.)					
143, 409	Fahrney, E., Deep River, Iowa. Rein-holder	Oct. 7, 1873	11	4	4	381
	Fairbanks, G. S. (See Moody, F. G., assignor.)					
135, 417	Fairbanks, H., Saint Johnsbury, Vt. Toy-blocks	Feb. 4, 1873	23	7	3	129
136, 714	Fairbanks, H., and I. J. Robinson, Saint Johnsbury, Vt. Carpenters' bevel	Mar. 11, 1873	329	109	3	281
	Fairbanks, T., Saint Johnsbury, Vt. Platform-scales (Extension)	Dec. 20, 1873			4	640
	Fairchild, A. (See Naylor & Fairchild.)					
	Fairchild, F. H., et al. (See McGee, S., assignor.)					
144, 079	Fairchild, J. M., New Haven, Conn. Lock for fire-alarm boxes	Oct. 28, 1873	651	214	4	461
6, 539	Fairchild, L. W., New York, N. Y. Pen-sign (Design)	Apr. 1, 1873			3	356
	Fairchild Water-Meter Company. (See White, A. M., assignor.)					
	Fairfield, H. P. (See Glidden & Fairfield.)					
142, 452	Fairfield, H. P., assignor to J. W. Brooks, trustee, Boston, Mass. Air-compressor	Sept. 2, 1873	116	37	4	252
143, 682	Fairfield, H. P., and W. W. Messer, jr., Boston, Mass. Machinery for finishing the sole-edges of boots and shoes	Oct. 14, 1873	263	87	4	410
140, 908	Fairlie, R. F., London, England. Apparatus for extracting nitrate of soda	July 15, 1873	505	170	4	69
	Fairman, J. (See De Witt & Fairman.)					
139, 460	Fairman, J., New York, N. Y. Trunk and strap fastener	June 3, 1873	16	5		
	Fairman, S. H., et al. (See Pelham, A., assignor.)					
140, 354	Fales, A. B., and H. Seabury, said Seabury assignor to said Fales, Albany, N. Y. Reservoir cooking-stove	July 1, 1873	19	6	4	9
139, 133	Fales, E. C., Foxborough, Mass. Machine for blocking hats	May 20, 1873	609	191	3	570
137, 352	Fales, J. E., assignor to Rice, Barton & Fales Machine and Iron Company, Worcester, Mass. Expanding pulley	Apr. 1, 1873	69	22	3	362
142, 453	Fales, L. S., Monmouth Junction, N. J. Compound for preserving wood	Sept. 2, 1873	117		4	252
143, 444	Falke, C., New York, N. Y. Apparatus for graining wood, &c.	Oct. 7, 1873	41	14	4	324
145, 286	Fallows, J., assignor to C. B. Porter & Co., Philadelphia, Pa. Handle for sheet-metal ware	Dec. 9, 1873	228	77	4	616
	Fallows, J. T. (See Walton & Fallows.)					
137, 064	Fancher, C. H., assignor to self and F. A. J. Diss, San Francisco, Cal. Forming and gauging butter-rolls	Mar. 25, 1873	650	215	3	327
134, 873	Fankhauser, L., Columbus, Ohio. Carpet-stretcher	Jan. 14, 1873	350	111	3	48
	Fanning, J. (See Nugent & Fanning.)					
145, 287	Fanning, J., and E. Nugent, Brooklyn, N. Y. Sewing-machine	Dec. 9, 1873	228	77	4	616
	Fanning, W. W. (See Cox & Fanning.)					
135, 326	Fanslau, R., New Haven, Conn. Machines for cutting food for animals	Jan. 28, 1873	778	252	3	110
	Fantini, T. (See Timm & Fantini.)					
145, 288	Farciot, C. W., Kelley's Island, Ohio. Filter for wine	Dec. 9, 1873	229	77	4	616
145, 289	Faries, R., Decatur, Ill. Sash-balance	Dec. 9, 1873	230	78	4	616
	Faris, J. A. (See Duffield, W. C., assignor.)					
142, 621	Faris, R. W., Murfreesborough, Tenn. Traveling thrashing-power	Sept. 9, 1873	272	89	4	276
134, 741	Farley, C. H., Portland, Me. Locomotive fire-box	Jan. 14, 1873	234	75	3	39
137, 667	Farley, H. W., Oswego, Ill. Elevated way	Apr. 8, 1873	355	110	3	397
145, 638	Same. same.	Dec. 16, 1873	543	{ 178 } 179	4	653
140, 262	Farmer, G. P., Brooklyn, N. Y. Needle setter and threader for sewing-machines	June 24, 1873	761	240	3	702
138, 999	Farmer, J. C., Providence, R. I. Thimble for protecting boiler-flues	May 20, 1873	486	154	3	560
	Farmer, M. G., Salem, Mass. Electro-magnetic fire-alarm apparatus (Extension)	Feb. 22, 1873			3	218
	Same. Electro-magnetic telegraph (Extension)	Nov. 15, 1873			4	504
134, 874	Farmer, W., New York, N. Y. Hydraulic mains of gas-works	Jan. 14, 1873	350	111	3	48
	Farmers' Friend Manufacturing Company. (See Kneisly & Weusthoff, assignors.)					
138, 141	Farnsworth, E., Tipton, Pa. Car-brake	Apr. 22, 1873	791	252	3	455
143, 001	Farnsworth, L. H., Hudson, assignor to the Boot and Shoe Improvement Company, Boston, Mass. Boot	Sept. 23, 1873	606	206	4	324
140, 355	Farquhar, A. B., York, Pa. Machine for making plow-handles	July 1, 1873	19	6	4	9
138, 999	Farquhar, S., Boston, Mass. Mode of attaching roofing-slates	May 20, 1873	486	154	3	560
	Farr, C. N. (See Van Horn & Farr.)					
	Farr, G. (See Hubbard, E. R., assignor.)					
141, 869	Farrand, W. D., New York, N. Y. Spark-arrester	Aug. 19, 1873	435	142	4	187
145, 099	Farrant, F., Gloversville, N. Y. Gauntlet-glove	Dec. 2, 1873	57	18	4	590
138, 237	Farrar, A., Brookline, Mass. Refining petroleum	Apr. 29, 1873	902		3	472
142, 782	Farrar, F. W., Waterford, Pa. Compound tool	Sept. 16, 1873	420	142	4	298
136, 314	Farrar, O., Chicago, Ill. Sewing-machine	Feb. 25, 1873	850	274	3	232
5, 581	Farre, W. T., Montreal, Canada. Machine for bending tubing (Reissue)	Sept. 30, 1873	947	320	4	368
5, 582	Same. Method of bending tubing (Reissue)	Sept. 30, 1873	949	321	4	368
136, 593	Same. Ice-tongs	Mar. 11, 1873	231	78	3	273
144, 449	Same. Machine for bending tubing	Nov. 11, 1873	240	81	4	509
138, 876	Farrel, F., Ansonia, Conn. Crane	May 13, 1873	375	117	3	538
141, 551	Same. Hoisting-apparatus	Aug. 5, 1873	122	38	4	145
139, 561	Farrell, F., assignor to self and A. J. Nichols, Cincinnati, Ohio. Car-seat	June 3, 1873	102	34	3	617
134, 531	Farrington, J., Corry, Pa. Harvester	Jan. 7, 1873	26	9	3	9
144, 604	Farrington, J. D., jr., New York, N. Y., and T. P. Austin, Portland, Conn. Sheet-metal coffin	Nov. 18, 1873	379	128	4	532
141, 501	Farrington, W., Brooklyn, N. Y., assignor to C. Chambers, jr., and E. Chambers, Philadelphia, Pa. Packing and carrying device for paper-folding machines	Aug. 5, 1873	82	26	4	142
141, 780	Farris, W. H., Cairo, Ill. Fire-grate	Aug. 12, 1873	339	{ 111 } 112	4	170
142, 009	Farrow, W., Alexandria, Ill. Machine for dressing mill-stones	Aug. 19, 1873	548	181	4	197
145, 162	Farson, E. S., Philadelphia, Pa. Ironing-table	Dec. 2, 1873	115	38	4	594
137, 428	Farwell, W. B., New York, N. Y. Machine-gun	Apr. 1, 1873	132	43	3	368
137, 603	Fasoldt, C., Albany, N. Y. Clock-escapement	Apr. 8, 1873	300	93	3	393

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 973	Fath, V., Saint Louis, Mo. Stove-pipe thimble.	Oct. 28, 1873	559	185	4	454
142, 454	Faubion, M. W., Parrottsville, Tenn. Fertilizer-distributor.	Sept. 2, 1873	117	37	4	252
143, 132	Faucett, E. W., E. W. Silver, and J. Deming, assignors to A. R. Silver and J. Deming, Salem, Ohio. Hollow auger.	Sept. 23, 1873	711	244	4	332
140, 692	Faucett, H. W., Titusville, Pa. Apparatus for raising oil, &c., from wells.	July 8, 1873	313	106	4	45
143, 974	Faught, L. R., Philadelphia, Pa. Horse-power.	Oct. 28, 1873	559	186	4	454
134, 875	Fauh, E., New York, N. Y. Folding-chair, bed, and ottoman combined.	Jan. 14, 1873	351	112	3	48
140, 693	Faul, W. J., New York, N. Y. Self-cleaning tobacco-cutter.	July 8, 1873	314	106	4	45
	Faulkner, E. H. (See Turpie, J., assignor.)					
143, 975	Faulkner, W. J., Chicago, Ill. Tuck-creaser for sewing-machines.	Oct. 28, 1873	561	186	4	454
142, 222	Fauver, J. W., Augusta County, Va. Ditching-machine.	Aug. 26, 1873	754	249	4	223
141, 265	Fawcett, E. W., and R., and W. E. Sefton, Salem, said Fawcett assignor to E. S. Holloway, Columbiana, Ohio. Bolt-cutter.	July 29, 1873	871	285	4	115
144, 895	Fawcett, J., Boston, Mass. Fire indicator and alarm.	Nov. 25, 1873	634	216	4	563
145, 559	Fawcett, L., Salem, Ohio. Rein-holder.	Dec. 16, 1873	478	156	4	648
	Fawcett, R. (See Fawcett, E. W. and R., and Sefton.)					
143, 817	Fawcett, T., New York, N. Y. Harness-mounting.	Oct. 21, 1873	405	135	4	431
143, 683	Faxon, J. W., Boston, Mass. Cock.	Oct. 14, 1873	265	87	4	410
135, 977	Fay, C. T., assignor to Jenison Lubricator Company, San Francisco, Cal. Car-axle box.	Feb. 18, 1873	544	180	3	196
	Fay, J. A., & Co. (See Bugbee, G. W., assignor.)					
	Same.....(See Doane & Dobson, assignors.)					
	Same.....(See Doane, W. H., assignor.)					
	Same.....(See Dobson, W. H., assignor.)					
137, 189	Fay, W., New Orleans, La. Automatic fan.	Mar. 25, 1873	763	252	3	336
6, 952	Fayerweather, J. S., Bridgefield, Conn. Hat. (Design).	Oct. 7, 1873			4	380
	Feamster, T. L. (See Moore, C. T., assignor.)					
138, 388	Fearon, T., Yonkers, N. Y. Row-lock.	Apr. 29, 1873	1, 038	327	3	483
	Feas, A. (See Johnson, M., assignor.)					
137, 662	Fee, J. S., Rockford, Ind. Stirrup.	Apr. 8, 1873	356	110	3	397
5, 550	Fee, W. R., Cincinnati, Ohio. Machine for hulling cotton-seed. (Reissue).	Aug. 26, 1873	837	278	4	230
	Feeder, S. (See Rosenstein & Feeder.)					
142, 010	Feely, L., Rochester, N. Y. Clamp.	Aug. 19, 1873	549	{ 181 182 }	4	197
146, 056	Same.....Bit-stock.	Dec. 30, 1873	941	303	4	708
143, 133	Fehr, J., Hoboken, N. J. Medical compound or powder for infants.	Sept. 23, 1873	712		4	332
144, 605	Feix, J., San Francisco, Cal. Ingot-mold for gold or silver.	Nov. 18, 1873	380	128	4	532
144, 896	Same.....Manufacture of copper ingots for alloying gold and silver.	Nov. 25, 1873	635		4	563
144, 080	Feldkamp, G., Cincinnati, Ohio. Chair.	Oct. 28, 1873	652	{ 214 215 }	4	462
136, 984	Felgner, E. L., Baltimore, Md. Tobacco-package.	Mar. 18, 1873	566		3	309
	Fell, S. B., et al. (See Weagant, H. L., assignor.)					
134, 876	Fellner, L. G., Las Vegas, N. Mex. Extract of yucca.	Jan. 14, 1873	352		3	48
139, 503	Fellows, C. E., Philadelphia, Pa. Case for containing indexes.	June 3, 1873	52	17	3	613
140, 909	Fels, M. and J. W., Cincinnati, Ohio. Railway-switch.	July 15, 1873	507	171	4	69
	Fels, J. W. (See Fels, M. and J. W.)					
134, 985	Felt, J. Q., Detroit, Mich. Wood pavement.	Jan. 21, 1873	459	147	3	72
	Felton, L. (See Rogers & Felton.)					
144, 525	Felzer, W., Frank Hill, Minn. Treadle.	Nov. 11, 1873	304	102	4	514
145, 057	Fend, J., and J. W. Stevenson, Johnstown, Pa. Railway time-signal.	Dec. 2, 1873	16	6	4	587
	Fender, W. J., et al. (See Hardenbergh, Miner & Fender.)					
	Fenimore, G. W. (See Barrett & Fenimore.)					
144, 391	Fenner, C. A., Mystic River, Conn. Cradle.	Nov. 11, 1873	193	66	4	506
	Fenninger, M. B. (See Eby & Fenninger.)					
134, 793	Fenno, L., Boston, Mass. Cloth-cutting machine.	Jan. 14, 1873	278	90	3	42
144, 606	Fenton, F. A., Camden, N. J. Hatters' head-measure.	Nov. 18, 1873	381	128	4	532
	Feret, L. (See Scacher & Feret.)					
144, 607	Ferguson, D. P., Jonesborough, Ga. Cotton-seed planter.	Nov. 18, 1873	382	128	4	532
	Ferguson, J. C. (See Kinsley & Ferguson.)					
	Ferguson, P. H. (See Spence, A., assignor.)					
	Ferguson, R. (See Martin & Ferguson.)					
137, 767	Ferguson, W., assignor to self, T. A. Lathrop, and T. H. Reeves, Canton, Ohio. Saw-swage.	Apr. 15, 1873	455	142	3	418
143, 687	Ferguson, W. H., Forest, Ill. Manufacture of boots.	Oct. 14, 1873	269	88	4	410
	Ferm, C. (See Rosenstjerna, A., assignor.)					
137, 540	Fernald, E. C., Flatbush, N. Y. Safety-valve.	Apr. 8, 1873	245	75	3	388
137, 541	Same.....Feed-water regulator.	Apr. 8, 1873	246	75	3	388
142, 223	Fernald, H. B., Washington, D. C. Signal-lantern.	Aug. 26, 1873	756	249	4	223
143, 231	Ferren, M., Freedom, N. H. Car-coupling.	Sept. 30, 1873	798	275	4	355
137, 903	Ferren, M. J., Stoneham, assignor to H. E. Townsend, Boston, Mass. Welt-edge burnishing-tool.	Apr. 15, 1873	573	180	3	428
	Ferrier, J. (See Haskins, C. C., assignor.)					
137, 298	Ferrin, F., Camden, N. J. Carrier for lathes.	Apr. 1, 1873	17	5	3	358
	Ferris & Miles. (See Miles, F. B., assignor.)					
144, 081	Ferris, J. L., South Brunswick, assignor to self and I. S. Buckalew, Jamesburgh, N. J. Spark-arrester.	Oct. 28, 1873	653	215	4	462
144, 197	Ferris, L., San Francisco, Cal. Glove-fastener.	Nov. 4, 1873	23	7	4	480
	Ferris, O. C., et al. (See Hahn, F. E., assignor.)					
	Same.....(See Miles, F. B., assignor.)					
145, 936	Ferris, S., New York, N. Y. Railway-rail chair.	Dec. 30, 1873	835	272	4	699
	Ferry, W. M. (See Gronberg & Ferry.)					
	Ferry, W. M., Grand Haven, Mich. Journal-box for saw-mill carriages. (Extension).	Nov. 29, 1873			4	557
143, 563	Ferslew, W. E., New Orleans, La. Compound for making artificial stone.	Oct. 14, 1873	157		4	402
139, 134	Fetter, G., Philadelphia, Pa. Car-starter.	May 20, 1873	611	191	3	570
139, 562	Fewell, C. L., Corsicana, Tex. Bed-bug exterminator.	June 3, 1873	103	34	3	617
135, 791	Fewkes, J. T., assignor to self, J. L. Wilkins, and W. C. Cranmer, Philadelphia, Pa. Sad-iron.	Feb. 11, 1873	375	120	3	169
	Feyh, A. (See Schlich & Feyh.)					
134, 794	Fickett, H. S., Yarmouth, Me. Leather punch and cutter.	Jan. 14, 1873	279	91	3	43
141, 638	Fickett, W. S., Rochester, N. Y. Blacking-brush.	Aug. 12, 1873	215	68	4	160
140, 126	Field, A., Springfield, Mass. Medical compound or lotion for the skin.	June 24, 1873	648		3	692
136, 715	Field, D. C. G., Lowell, Mass. Loom-shuttle.	Mar. 11, 1873	330	109	3	281
5, 431	Field, E. S., Middlesex County, England. Flexible lip-formed valve. (Reissue).	June 3, 1873	177	58	3	623
138, 490	Field, E. S., Hartford, Conn. Spring bed-bottom.	May 6, 1873	19	7	3	499
138, 491	Same.....Same.	May 6, 1873	20	7	3	449
139, 563	Field, G. W., and J. Steger, New York, N. Y. Car-starter.	June 3, 1873	103	35	3	617

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145,560	Field, S., Galva, Ill. Medical compound	Dec. 16, 1873	479		4	648
140,618	Field, S. D., San Francisco, Cal. Screw-post for electrical apparatus	July 8, 1873	253	85	4	40
	Field, S. T., Worcester, Mass. Machine for manufacturing wooden troughs. (Extension)	Feb. 1, 1873	.....	.....	3	70
138,492	Field, W. D., Providence, R. I. Cotton-bale tie	May 6, 1873	21	7	3	499
140,024	Same	June 17, 1873	535	169	3	675
143,976	Fields, M. F., Lawrence, Mass. Loom-shuttle	Oct. 28, 1873	562	186	4	454
144,608	Fields, W., Wilmington, Del. Dumping-wagon	Nov. 18, 1873	383	129	4	532
136,826	Fifield, L. W., Worcester, Mass. Window-screen	Mar. 18, 1873	437	145	3	299
139,135	Filkins, A., Ypsilanti, Mich. Washing-machine	May 20, 1873	612	191	3	570
141,266	Filkins, R. A., Cheshire, assignor to self and A. R. Tyrrell, Savoy, Mass. Musical railway-signal	July 29, 1873	871	285	4	115
142,385	Filkins, R. A., Cheshire, Mass. Steam-lubricator	Sept. 2, 1873	59	20	4	247
144,269	Filley, G. F., Saint Louis, Mo. Fender	Nov. 4, 1873	84	28	4	485
	Fillmore, C. W., et al. (See Dorman, L., assignor)					(Reissue.)
142,783	Filmer, W., San Francisco, Cal. Apparatus for casting printers' leads	Sept. 16, 1873	421	142	4	298
138,238	Filson, L., Bushnell, Ill. Automatic gate	Apr. 29, 1873	903	285	3	472
	Filter, W. (See Du Bois, H. M., assignor.)					
	Finch, E. B., & Son. (See Meyersberg, A., assignor.)					
137,429	Finch, J. M., assignor to J. M. Finch and U. Torry, Cedar Falls, Iowa. Hopper and casing for grinding-mills	Apr. 1, 1873	134	44	3	368
6,635	Finch, R. R., assignor to Union Stove Works, Peekskill, N. Y. Cooking-stove. (Design.)	May 27, 1873	.....	.....	3	586
	Finch, W. (See Swan & Finch.)					
	Fink, A. J. (See Seltzer & Fink.)					
145,855	Fink, A. J. & J., Reading, Pa. Refrigerator	Dec. 23, 1873	739	242	4	681
	Fink, J. (See Fink, A. J. & J.)					
135,418	Finkbeiner, G., Syracuse, N. Y. Slide for extension-tables	Feb. 4, 1873	24	7	3	129
134,887	Finley, J. R., Delphi, Ind. Latch for gates	Jan. 14, 1873	352	112	3	48
137,834	Finn, C., Des Moines, Iowa. Bee-hive	Apr. 15, 1873	514	160	3	423
134,432	Finn, J., Boston, Mass. Machine for molding marble	Jan. 7, 1873	27	9	3	9
135,535	Same	Feb. 4, 1873	130	41	3	138
138,079	Same	Apr. 22, 1873	743	235	3	451
141,213	Same	July 29, 1873	821	268	4	111
140,818	Finney, J. A., Nashville, Ohio. Insect-destroyer	July 15, 1873	427	144	4	62
143,280	Finton, G., Meadville, Pa. Oscillating gland for flowing oil-wells	Sept. 30, 1873	840	289	4	359
5,643	Firman, H. S., New York, N. Y. Apparatus for rendering fats and deodorizing the gases	Nov. 4, 1873	176	60	4	493
136,827	Same	Mar. 18, 1873	438	145	3	299
	Firth, J., deceased, by M. Firth and J. Ingham, executors, Phillipsburgh, Pa., and J. Ingham. Pipe-molding. (Extension.)	Dec. 20, 1873	.....	.....	4	640
140,619	Firth, J. B., Brooklyn, N. Y. Cake-pan	July 8, 1873	254	86	4	40
	Firth, M., executrix. (See Firth & Ingham)					(Extension.)
137,669	Firth, S., Leeds, England. Machine for cutting coal	Apr. 8, 1873	356	{ 110 111 }	3	397
144,752	Fischer, C., Gloucester, N. J. Centrifugal sugar-draining machine	Nov. 18, 1873	503	171	4	542
140,910	Fischer, C. A., Baltimore, Md. Mold for forming clay articles	July 15, 1873	509	171	4	69
138,559	Fischer, E. J., Philadelphia, Pa. Stamp for cutting out figures	May 6, 1873	83	27	3	504
139,136	Fischer, F. A., Harzburg, Germany. Condensing and feed apparatus for steam-boilers	May 20, 1873	612	{ 191 192 }	3	570
135,327	Fischer, H. S., Xenia, Ohio, and D. Bruhn, Eckernforde, Schleswig, Prussia. Securing carriage-wheels to their axles	Jan. 28, 1873	778	252	3	110
5,475	Fischer, W. E., Boston, assignor by mesne assignment to C. H. Trask, Lynn, and Gould, Boston, Mass. Hand-nailer for lasting boots and shoes	July 1, 1873	203	67	4	25
	Fish, J. C. (See West & Fish.)					
141,707	Fish, R. A., Worcester, Mass. Cultivator	Aug. 12, 1873	273	89	4	165
	Fisher, A. J. et al. (See Ernst, J. G., assignor.)					
140,998	Fisher, F. A., Elizabeth, N. J. Carbureter	July 22, 1873	607	205	4	86
	Fisher, G. (See Loesch, F., assignor.)					
	Fisher, G. B. (See Burnet & Fisher.)					
6,412	Fisher, J. Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Feb. 18, 1873	.....	.....	3	189
6,413	Same	Feb. 18, 1873	.....	.....	3	189
6,414	Same	Feb. 18, 1873	.....	.....	3	189
6,415	Same	Feb. 18, 1873	.....	.....	3	189
6,594	Same	Apr. 22, 1873	.....	.....	3	444
7,050	Same	Dec. 16, 1873	.....	.....	4	641
6,705	Fisher, J., Philadelphia, Pa. Carpet	June 17, 1873	.....	.....	3	663
6,706	Same	June 17, 1873	.....	.....	3	663
6,707	Same	June 17, 1873	.....	.....	3	663
6,708	Same	June 17, 1873	.....	.....	3	663
136,828	Fisher, J. B., Amsterdam, N. Y. Wash-board	Mar. 18, 1873	439	145	3	299
136,909	Same	Mar. 18, 1873	504	167	3	304
143,068	Fisher, J. H., Chicago, Ill. Tap-holder attachment for beer-coolers	Sept. 23, 1873	663	227	4	328
137,065	Fisher, J. S., Utica, Mo. Wheel for road-steamers	Mar. 25, 1873	651	216	3	327
140,263	Fisher, R. A., San Francisco, Cal. Means for preventing incrustation in steam-boilers	June 24, 1873	761	.....	3	702
141,043	Same	July 22, 1873	646	217	4	89
145,496	Same	Dec. 16, 1873	415	.....	4	643
140,768	Fisher, R. C., Belleville, N. Y. Eye-wash	July 15, 1873	380	.....	4	59
	Fisher, T. J. (See Jones, G., assignor.)					
138,389	Fiske, I., Worcester, Mass. Musical wind-instrument	Apr. 29, 1873	1,039	327	3	483
143,134	Same	Sept. 23, 1873	712	244	4	333
	Fitch, E. T., et al. (See Hubbard, G., assignor.)					
143,445	Fitch, G. L., and H. M. Jones, Little Lake, Cal. Shoe-fastening	Oct. 7, 1873	42	15	4	384
	Fitch, L. M. (See Grannis & Fitch.)					
137,904	Fitch, L. M., Morrisville, N. Y. Towel and clothes rack	Apr. 15, 1873	573	180	3	428
134,656	Fitch, P. S., Hanly, Ky. Hemp-harvester	Jan. 7, 1873	147	47	3	18
136,496	Fitch, S. S., New York, N. Y. Ice-cream freezer	Mar. 4, 1873	125	40	3	255
136,829	Same	Mar. 18, 1873	440	146	3	299
137,604	Same	Apr. 8, 1873	301	93	3	393
140,769	Same	July 15, 1873	381	131	4	59
143,446	Same	Oct. 7, 1873	42	15	4	384
143,564	Same	Oct. 14, 1873	157	53	4	402
	Fitch, W., et al. (See Hubbard, G., assignor.)					
	Fitts, B. (See Ball & Fitts.)					
	Fitts, B., Worcester, Mass. Governor-valve	Aug. 9, 1873	.....	.....	4	134
135,103	Fitts, B., assignor to Union Water-Meter Company, Worcester, Mass. Damper-regulator	Jan. 21, 1873	557	182	3	80

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette	
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146, 057	Fitts, B., assignor to Union Water-Meter Company, Worcester, Mass. Valve	Dec. 30, 1873	942	303	4	708
5, 654	Fitts, R. B., assignor by mesne assignment to the Nutrio Manufacturing Company, Philadelphia, Pa. Preparing wheat and other grain for food. (Reissue) ..	Nov. 11, 1873	367	.....	4	519
5, 655	Same.....same.....(Reissue) ..	Nov. 11, 1873	368	.....	4	519
140, 127	Fitzgerald, G. W., Jerseyville, Ill. Portable rick-cover.....	June 24, 1873	648	204	3	692
144, 082	Fitzgerald, O., Dexter, Me. Bottle-protector.....	Oct. 28, 1873	653	215	4	462
	Fitzgibbons, M. (See Hornfager & Fitzgibbons.) ..					
	Fitzgibbons, M., et al. (See Palmer, H. L., assignor) ..					
137, 768	Fitzhugh, B. G., Frederick, Md. Cart-loading apparatus	Apr. 15, 1873	456	{ 142 } 143	3	418
138, 013	Fitzhugh, B. G., Frederick, assignor to M. Martin, Baltimore, Md. Dumping-cart.....	Apr. 22, 1873	680	215	3	446
138, 014	Same.....Curtain-roller holder.....	Apr. 22, 1873	682	215	3	446
140, 025	Fitzhugh, B. G., assignor to J. Byerly, Frederick, Md. Dumping-cart	June 17, 1873	536	169	3	675
136, 985	Fitzsimmons, H., Houston, Texas. Balanced valve.....	Mar. 18, 1873	568	189	3	309
145, 854	Flack, C. E., Jacksonville, Ill. Pessary	Dec. 23, 1873	738	241	4	681
144, 970	Flagg, T. J., New York, N. Y. Suspender.....	Nov. 25, 1873	695	235	4	569
142, 622	Flagler, H. K., assignor to the National Tube-Works Company, Boston, Mass. Tube-welding mandrel.....	Sept. 9, 1873	273	89	4	276
139, 564	Flanagin, J., Pawnee City, Nebr. Plow-truck.....	June 3, 1873	104	35	3	617
141, 341	Flanders, L., Paw Paw, Mich. Stump-extractor.....	July 29, 1873	943	307	4	120
140, 819	Flanders, J. P., assignor to self and E. B. Hayes, Vergennes, and A. M. Mitchell, Burlington, Vt. Double acting force-pump	July 15, 1873	428	145	4	62
139, 886	Flanders, L. B., Philadelphia, Pa. Attaching cork-retaining bail to bottles.....	June 17, 1873	424	132	3	666
	Flanders, M. R. (See Burdick & Flanders.) ..					
136, 427	Flanagin, F. A., Fagundus City, Pa. Lamp	Mar. 4, 1873	61	22	3	250
136, 230	Flanigan, W. H., Philadelphia, Pa. Combined ruler and pencil-sharpener	Feb. 25, 1873	776	250	3	226
136, 648	Flatley, A., Brooklyn, N. Y. Clasp-button.....	Mar. 11, 1873	276	92	3	276
137, 353	Same.....Collar.....	Apr. 1, 1873	70	22	3	362
	Fleeheart, J. T. (See Collins, S. C., assignor.) ..					
139, 137	Fleeheart, J. T., assignor of one-half interest to C. S. Collins, Baltimore, Md. False mantel	May 20, 1873	614	192	3	570
	Fleer, F. R. (See Bellemere & Fleer.) ..					
137, 190	Fleetwood, T. M., Savannah, Ga. Combined sail and marine drag	Mar. 25, 1873	764	252	3	336
135, 214	Fleischhauer, A., Brooklyn, N. Y. Tanning hides	Jan. 28, 1873	677	.....	3	102
136, 147	Fleischmann, C. L., Washington, D. C. Revivifying charcoal used in rectifying spirits ..	Feb. 25, 1873	713	.....	3	221
142, 845	Fleishman, S. L., Pittsburgh, Pa. Glass-blowing machine	Sept. 16, 1873	470	159	4	302
143, 752	Fleming, F. A., Curwinstown, Pa. Car-coupling	Oct. 21, 1873	349	116	4	427
141, 708	Fleming, J., Shamburgh, Pa. Valve for artesian wells, &c.....	Aug. 12, 1873	274	89	4	165
145, 163	Fleming, J. G., Cochran, Pa. Hames-fastener	Dec. 2, 1873	116	38	4	594
145, 856	Fletcher, A. C., New York, N. Y. Car-wheel.....	Dec. 23, 1873	740	242	4	681
145, 857	Same.....Paddle-wheel.....	Dec. 23, 1873	741	242	4	681
143, 565	Fletcher, H., Louisville, Ky. Cutter-head	Oct. 14, 1873	158	53	4	402
	Fletcher, T. H. (See Morrison & Fletcher.) ..					
139, 138	Fletcher, W. H., Washington, D. C. Window-screen.....	May 20, 1873	614	192	3	571
	Flickinger, A. E. (See Huber & Flickinger.) ..					
140, 620	Flietstra, W. K., Holland, Mich. Washing-machine	July 8, 1873	254	86	4	40
145, 858	Fling, L. J., Hudson, and A. Land, Hillsdale, Mich., said Fling assignor to H. Black-mar, Hillsdale, Mich. Sewing-stand	Dec. 23, 1873	742	{ 242 } 243	4	681
138, 239	Flint, D. B., assignor to the Rodney Hunt Machine Company, Orange, Mass. Turbine-Wheel.....	Apr. 29, 1873	903	285	3	472
135, 268	Flora, F., Pierce, Ohio. Animal-trap.....	Jan. 28, 1873	727	233	3	106
145, 639	Flora, O. V., assignor to self, J. G. Moore, and J. B. Ross, Madison, Ind. Saddle-tree.....	Dec. 16, 1873	545	179	4	653
	Florence Manufacturing Company. (See Estabrook, A. C., assignor.) ..					
143, 684	Flory, M. K., Viola, Ill. Revolving horse-rake.....	Oct. 14, 1873	265	88	4	410
140, 128	Flower, J., Detroit, Mich. Screw-tap.....	June 24, 1873	649	204	3	693
142, 011	Flowers, F. I., Tarrytown, N. Y. Side-bar for vehicles.....	Aug. 19, 1873	550	182	4	197
144, 023	Fluck, N. C., Gloucester, England. Machine for cutting cloth	Oct. 28, 1873	604	200	4	458
	Flüschheim, M. (See Korwan, F., assignor.) ..					
143, 685	Flynn, M. B., Brooklyn, N. Y. Screw-cutting machine.....	Oct. 14, 1873	266	88	4	410
143, 002	Flynt, O. P., Boston, Mass. Lady's under-vest.....	Sept. 23, 1873	607	206	4	324
144, 609	Same.....Under-garment.....	Nov. 18, 1873	383	129	4	532
135, 419	Foard, J. W., San Francisco, Cal. Peg-rasp	Feb. 4, 1873	24	7	3	129
145, 164	Fobes, A., Attleborough, Mass. Bracelet.....	Dec. 2, 1873	117	38	4	594
	Fobes, D. (See Wells, H., assignor.) ..					
139, 461	Foehl, C., Philadelphia, Pa. Revolving fire-arm.....	June 3, 1873	16	5	3	610
134, 433	Fogarty, T. B., New York, N. Y. Spring motive-power	Jan. 7, 1873	28	9	3	9
135, 978	Same.....Gas-burner.....	Feb. 18, 1873	544	180	3	196
135, 979	Same.....same.....	Feb. 18, 1873	545	180	3	196
135, 980	Fogarty, T. B., Warren, Mass. Gas-machine	Feb. 18, 1873	546	181	3	196
135, 981	Same.....Carbureter.....	Feb. 18, 1873	547	181	3	196
135, 982	Same.....same.....	Feb. 18, 1873	548	181	3	196
6, 493	Fogelstrand, O. F., assignor to J. P. Connell, Kensington, Conn. Ornamenting bells. (Design).....	Mar. 18, 1873	.....	.....	3	297
6, 775	Fogelstrand, O. F., assignor to Hart, Bliven & Mead Manufacturing Company, Kensington, Conn. Drawer-pull.....(Design) ..	July 15, 1873	.....	.....	4	58
6, 896	Same.....Boot-jack.....(Design) ..	Sept. 30, 1873	.....	.....	4	354
6, 973	Same.....Bracket.....(Design) ..	Nov. 4, 1873	.....	.....	4	478
135, 215	Fogelstrand, O. F., Kensington, Conn. Door-button	Jan. 28, 1873	677	219	3	102
138, 142	Fogg, T., Saint Mary's, Canada. Convertible freight-car	Apr. 22, 1873	792	253	3	455
136, 986	Foglesong, W., Dayton, Ohio, assignor to self, J. E. Boyer, J. McMaster, and I. Haas. Machine for wiring sheet-metal pans	Mar. 18, 1873	568	{ 189 } 190	3	309
141, 925	Foit, J. S., Kenton, Ohio. Automatic gate	Aug. 19, 1873	480	158	4	191
143, 895	Foley, M., Appleton, Wis. Scroll-sawing machine	Oct. 21, 1873	470	158	4	437
145, 937	Foley, W. F., assignor to P. R. Clute, Albany, N. Y. Device for trimming leather.....	Dec. 30, 1873	836	272	4	699
	Folk, J. E. (See Miller, S. H., assignor.) ..					
	Same.....(See Wilson & Miller, assignors.) ..					
	Same.....(See Wilson, C. F., assignor.) ..					
137, 605	Follensbee, G. S., and T. C. Entwistle, Lewiston, Me. Stop-mechanism for warping-machines	Apr. 8, 1873	301	93	3	393
139, 307	Follet, G., and A. Brummel, Brooklyn, N. Y. Hatchway.....	May 27, 1873	783	249	3	592
135, 536	Follett, J. L., Troy, N. Y. Sewing-machine.....	Feb. 4, 1873	131	41	3	138
137, 835	Follett, O. S., Mont Clair, N. J. Manufacture of glue	Apr. 15, 1873	515	.....	3	423
	Folsom, J. R. (See Addy, C. J., assignor.) ..					
139, 053	Fontaine, E., Fort Wayne, Ind. Spark-arrester.....	May 20, 1873	531	168	3	564

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
144, 753	Footte, A. D., Berlin, assignor to A. N. Helmer, Milwaukee, Wis. Rotary grain-dis-tributer.....	Nov. 18, 1873	505	171	4	542
140, 999	Footte, A. W., Buffalo, N. Y. Stove-pipe drum.....	July 22, 1873	608	205	4	86
135, 899	Footte, E., East Bloomfield, N. Y. Grain-band, bag-tie, &c.....	Feb. 18, 1873	483	156	3	191
137, 905	Footte, E., Yonkers, N. Y. Gas-burner.....	Apr. 15, 1873	574	180	3	428
140, 129	Footte, W. W., Saybrook, Ohio. Electric hotel-annunciator.....	June 24, 1873	650	204	3	693
5, 660	Forbes, J., Halifax, Nova Scotia. Skate..... (Reissue)...	Nov. 18, 1873	563	191	4	547
5, 705	Same..... same..... (Reissue)...	Dec. 23, 1873	820	267	4	687
146, 058	Forbis, H. K., assignor to self and J. W. Proctor, Danville, Ky. Mortising-tool.....	Dec. 30, 1873	943	304	4	708
136, 716	Force, W. M., Newark, N. J. Oil-press.....	Mar. 11, 1873	331	109	3	281
	Ford, E. (See Hughes, A. E., assignor.)					
	Ford, E. L. (See Kastenbein, C., assignor.)					
144, 083	Ford, E. T., Stillwater, N. Y. Potato-digger.....	Oct. 28, 1873	654	{ 215 } 216	4	462
143, 003	Ford, F., Point Pleasant, W. Va. Ice-breaker and fender.....	Sept. 23, 1873	608	206	4	324
137, 191	Ford, F. G., Bridgeton, N. J. Bedstead.....	Mar. 25, 1873	764	252	3	336
145, 410	Ford, F. G., Philadelphia, Pa. Flour-sifter.....	Dec. 9, 1873	234	112	4	624
142, 095	Ford, G. A., Cleveland, Ohio. Pulley-block.....	Aug. 26, 1873	650	214	4	214
143, 135	Ford, H. H., Sanford, Me., assignor of one-half interest to H. N. Ford, Boston, Mass., and I. H. Ford, Great Falls, N. H. Railway time-signal.....	Sept. 23, 1873	713	245	4	333
	Ford, H. M., et al. (See Ford, H. H., assignor.)					
	Ford, I. H., et al. (See Ford, H. H., assignor.)					
144, 198	Ford, J. C., Montreal, Canada, assignor of one-half interest to A. D. Cable. Pastern halter for hitching horses.....	Nov. 4, 1873	24	7	4	460
	Ford, L. (See Smith, E. D., assignor.)					
	Ford, M., et al. (See Harvey, J., assignor.)					
135, 420	Ford, S. A., Chicago, Ill. Smoke-burning furnace.....	Feb. 4, 1873	25	7	3	129
141, 870	Same..... Boiler-furnace.....	Aug. 19, 1873	436	142	4	187
143, 004	Same..... Smoke-burning furnace.....	Sept. 23, 1873	609	{ 206 } 207	4	324
	Forden, J. M., et al. (See Gross, E. L., assignor.)					
139, 565	Forden, J. M., assignor to E. L. Gross, J. M. Forden, J. K. Welter, J. O. Sloan, and J. Rayburn, Springfield, Ill. Seed-dropper.....	June 3, 1873	105	35	3	617
144, 327	Forden, J. M., Springfield, Ill. Seed-dropper.....	Nov. 4, 1873	128	43	4	489
143, 566	Forehand, S., and H. C. Wadsworth, Worcester, Mass. Revolving fire-arms.....	Oct. 14, 1873	159	53	4	402
137, 430	Foreman, B. F., and J. P. Speck, Upton, Pa. Bolt for flour and middlings.....	Apr. 1, 1873	135	44	3	368
	Foreman, S. H. (See Grosh & Foreman.)					
	Forest, H. (See Digney, J. D. and T., Lartigue, & Forest.)					
137, 606	Forgy, E. S., et al. (See Curtner, I., assignor.)					
138, 080	Forgy, E. S., Dayton, Ohio. Grain-drier.....	Apr. 8, 1873	302	93	3	393
137, 354	Same..... Mill-pick.....	Apr. 22, 1873	744	236	3	451
	Forman, W. A., assignor of one-half interest to W. H. Kelsey, Geneseo, N. Y. Machine for cutting and dressing stone.....	Apr. 1, 1873	70	22, 23	3	362
134, 742	Forrest, H. E., Cambridgeport, Mass., assignor to self, H. Boothby, Boston, Mass., and J. H. Leavitt, Portland, Me. Tool for finishing axle-blanks.....	Jan. 14, 1873	235	76	3	39
137, 769	Same..... Machine for turning carriage-axles.....	Apr. 15, 1873	459	143	3	418
138, 240	Forster, C., Pittsburgh, Pa. Rock and ore crusher.....	Apr. 29, 1873	904	285	3	472
135, 900	Forster, F. E., New York, N. Y. Fishing-line.....	Feb. 18, 1873	484	156	3	191
	Forsyth, J. B. (See Gately & Forsyth.)					
145, 792	Forsyth, O. C., jr., Newburgh, N. Y. Dust-pan.....	Dec. 23, 1873	686	225	4	677
137, 670	Forsyth, R. G., Oakland, Ill. Lamp-chimney cleaner.....	Apr. 8, 1873	358	111	3	397
141, 781	Fort, S. M., Syracuse, N. Y. Refrigerator.....	Aug. 12, 1873	341	112	4	171
144, 971	Fosket, W., assignor to C. Parker, Meriden, Conn. Shutter-hinge.....	Nov. 25, 1873	696	235	4	569
	Foskett, W. A. (See Brown & Foskett.)					
138, 390	Foster, A. D., Council Bluffs, Iowa. Prescription-file.....	Apr. 29, 1873	1,040	327	3	483
	Foster, D. P., Waltham, Mass. Wrench..... (Extension)...	Feb. 15, 1873			3	127
	Foster, H. T., et al. (See Foster, J. T., assignor.)					
	Foster, J. (See Wilson & Foster.)					
136, 428	Foster, J. J., Belmont, Tex. Floor-clamp.....	Mar. 4, 1873	62	22	3	250
137, 770	Foster, J. T., Jersey City, N. J. Door and gate spring.....	Apr. 15, 1873	460	143	3	418
137, 906	Foster, J. T., assignor to H. T. Foster and L. Mills, Jersey City, N. J. Flour-sieve.....	Apr. 15, 1873	575	180	3	428
134, 434	Foster, J. W., Pawtucket, R. I. Mandrel for making spools.....	Jan. 7, 1873	29	9	3	9
136, 429	Foster, J. W., assignor of one-half interest to E. A. Greene, Pawtucket, R. I. Gear-cutting machine.....	Mar. 4, 1873	63	22	3	250
136, 497	Foster, M. A., Saint Louis, Mo. Steam-boiler furnace.....	Mar. 4, 1873	126	41	3	256
138, 875	Same..... same.....	May 13, 1873	374	117	3	538
	Foster, R. (See Foster, W. and R.)..... (Extension)...					
137, 192	Foster, R. F., T. S. Baylie, and J. Harbin, Washington, D. C. Machine for rounding and backing books.....	Mar. 25, 1873	765	{ 252 } 253	3	336
141, 267	Foster, S. R., St. John, Canada. Shutter-worker.....	July 29, 1873	872	255	4	115
144, 665	Foster, T. G., Gloversville, N. Y. Glove.....	Nov. 18, 1873	431	146	4	536
5, 606	Foster, T. N., South Pass, Ill., assignor to H. H. Doubleday. Harvester..... (Reissue)...	Oct. 14, 1873	331	{ 109 } 110	4	415
5, 607	Same..... same..... (Reissue)...	Oct. 14, 1873	332	{ 110 } 111	4	415
142, 224	Foster, W., jr., New York, N. Y. Pneumatic signal-apparatus.....	Aug. 26, 1873	756	249	4	223
	Foster, W., and R. Foster, deceased, by W. Foster, executor, Brooklyn, N. Y. Screw-tap..... (Extension)...	Dec. 20, 1873			4	640
143, 567	Foster, W. A., Fitchburgh, Mass. Oil-can.....	Oct. 14, 1873	160	53	4	402
	Foster, W. B., et al. (See Cherrington, W. P., assignor.)					
	Foulke, P. B. (See Lang, J. C., assignor.)					
	Foulis, W. (See Wotherspoon & Foulis.)					
144, 526	Foulis, W., Glasgow, North Britain. Apparatus for charging and drawing gas-retorts..	Nov. 11, 1873	304	{ 102 } 103	4	514
144, 972	Foulke, E. A., Paris, Ill. Clothes-tongs.....	Nov. 25, 1873	697	235	4	569
	Foulke, J. (See Hunt, J., assignor.)					
138, 798	Fouts, F. A., Bloomington, Ill. Car-wheel.....	May 13, 1873	306	94	3	533
135, 104	Fowlds, T., jr., assignor of one-half interest to J. H. Gabel, Trevorton, Pa. Water-elevator.	Jan. 21, 1873	560	182	3	80
	Fowle, W. B. (See Smith, H. J., assignor.)					
	Fowler, B. A. (See Glidden, O. F., assignor.)					
135, 901	Fowler, C. W., Chicago, Ill. Window-screen.....	Feb. 18, 1873	484	156	3	191
	Fowler, E. P. (See Clements & Fowler.)					
143, 896	Fowler, F. G., Bridgeport, Conn. Steering-propeller.....	Oct. 21, 1873	471	158	4	437
136, 498	Fowler, G. B., Brooklyn, N. Y., assignor of one-half interest to E. S. and J. Torrey, New York, N. Y. Crusher and press for culinary purposes.....	Mar. 4, 1873	127	41	3	256

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 290	Fowler, H., Detroit, Mich. Cigar-box.....	Dec. 9, 1873	230	78	4	616
	Fowler, H. C. (See Stafford & Fowler.)					
	Fowler, J. H. (See Thurston, C. H., assignor.)					
140, 130	Fowler, J. N., Green Point, N. Y. Portable wardrobe.....	June 24, 1873	651	205	3	693
145, 640	Fowler, J. S., Davenport, Iowa. Harvester-dropper.....	Dec. 16, 1873	545	179	4	654
144, 610	Fowler, R. B., Worcester, Mass. Narrow-ware loom.....	Nov. 18, 1873	384	129	4	532
141, 342	Fowler, R. F., assignor to self and C. T. Martineourt, Canton, Ohio. Device for reducing and screw-threading rods.....	July 29, 1873	944	307	4	120
139, 462	Fowler, S. T., Brooklyn, N. Y. Building-block.....	June 3, 1873	17	5	3	610
	Fowler, S. W. (See Rearden, J., assignor.)					
142, 157	Fowler, W. M., Brooklyn, N. Y. Implement for uncapping, capping, and charging cart-ridges.....	Aug. 26, 1873	701	231	4	219
145, 997	Fox, C., and E. G. Heston, Gap, Pa. Telegraph-insulator.....	Dec. 30, 1873	887	288	4	703
138, 323	Fox, C. D., Philadelphia, Pa. Mold for glass bottles.....	Apr. 29, 1873	988	311	3	479
135, 105	Fox, C. H., New Orleans, La. Steam-boiler furnace.....	Jan. 21, 1873	560	182	3	80
135, 106	Same.....	Jan. 21, 1873	561	182	3	80
142, 906	Fox, E. A. C., Frederick City, Md. Smoke and spark conveyer for locomotives.....	Sept. 16, 1873	518	176	4	306
135, 537	Fox, F., and F. A. Howarth, Providence, R. I. Car-coupling.....	Feb. 4, 1873	133	42	3	138
	Fox, G. (See Woodward, L., assignor.)					
	Fox, J., Lansingburgh, N. Y. Cracker-machine..... (Extension).....	Feb. 1, 1873	.....	.....	3	324
143, 686	Same.....	Oct. 14, 1873	267	88	4	410
	Fox, J. J. (See Hiers, J., assignor.)					
135, 703	Fox, M., New York, N. Y. Dress-elevator.....	Feb. 11, 1873	299	94	3	163
137, 907	Foy, L. H., New Haven, Conn. Reversible cuff.....	Apr. 15, 1873	576	181	3	428
145, 497	Foye, W. H., Portland, Me. Bill and paper file.....	Dec. 16, 1873	416	137	4	643
141, 432	Fraiken, J. J., Fort Howard, Wis. Car-coupling.....	Aug. 5, 1873	19	5	4	136
137, 355	France, S. W., Brooklyn, N. Y. Reservoir cooking-stove.....	Apr. 1, 1873	71	23	3	362
139, 308	Francis, A. E., Ravenna, Ohio. Wrapper for bottles.....	May 27, 1873	784	249	3	592
143, 232	Frank, A. H., and G. Spire, Buffalo, N. Y. Planing-machine.....	Sept. 30, 1873	799	275	4	356
137, 908	Frank, D., Allentown, Pa. Screw-wrench.....	Apr. 15, 1873	577	181	3	428
135, 034	Frank, H., Pittsburgh, Pa. Bottle-label.....	Jan. 21, 1873	506	163	3	76
135, 639	Same..... Metallurgic gas-furnace.....	Feb. 11, 1873	241	76	3	158
135, 640	Same..... Regenerator furnace.....	Feb. 11, 1873	241	76	3	159
141, 639	Frank, J. H., assignor to S. S. Phillips and A. E. Vosburg, Ilion, N. Y. Ironing-table.....	Aug. 12, 1873	216	68	4	160
143, 338	Frank, J. H., Millheim, Pa. Cultivator.....	Sept. 30, 1873	890	304	4	363
143, 504	Frank, S. B., Knobnoster, Mo. Rotary steam-engine.....	Oct. 7, 1873	89	31	4	388
140, 356	Frankenfield, J., and W. E. Kichline, Bethlehem, Pa. Ironing-table.....	July 1, 1873	20	6	4	9
143, 618	Frankfeld, A., New York, N. Y. Clock-calendar.....	Oct. 14, 1873	206	69	4	406
143, 619	Same..... Double-stop movement for watches.....	Oct. 14, 1873	207	70	4	406
144, 084	Same..... Manufacture of music-box cylinders.....	Oct. 28, 1873	657	216	4	462
144, 270	Same..... Watch.....	Nov. 4, 1873	85	28	4	485
140, 492	Frankfoder, D., assignor to self and G. W. Staley, Wakarusa, Ind. Bed-bottom.....	July 1, 1873	126	44	4	18
135, 792	Franklin, G., Philadelphia, Pa. Car-spring.....	Feb. 11, 1873	376	120 121	3	169
138, 625	Franklin, G. E., Natick, Mass. Surfacing-plane.....	May 6, 1873	138	45	3	509
138, 081	Franklin, W. G., Shelbina, Mo. Gate-hinge.....	Apr. 22, 1873	744	236	3	451
141, 214	Frantze, P. J., M. Tillesen, and J. A. Gregersen, Chicago, Ill. Machine for cutting balusters.....	July 29, 1873	822	268	4	111
6, 757	Frary, J. D., New Britain, Conn. Table-cutlery..... (Design).....	July 8, 1873	.....	.....	4	36
7, 002	Same..... Knife-handle..... (Design).....	Nov. 25, 1873	.....	.....	4	558
7, 078	Same..... Handle for table-cutlery..... (Design).....	Dec. 30, 1873	.....	.....	4	698
	Frary, H. H. (See Nichols, C. W., assignor.)					
141, 343	Fraser, A., Virginia City, Nev. Steam-engine.....	July 29, 1873	945	307	4	121
141, 552	Fraser, A. J., Toledo, Ohio. Machine for bending shafts.....	Aug. 5, 1873	123	39	4	145
145, 342	Fraser, J. D., Picton, Canada. Vibrating propeller for vessels.....	Dec. 9, 1873	277	93	4	620
135, 269	Frazer, J. N., Elmer, N. J. Pump-handle.....	Jan. 28, 1873	728	233	3	106
142, 907	Frazer, K., Syracuse, N. Y. Buckle for harness.....	Sept. 16, 1873	519	177	4	306
143, 339	Frazer, R., Camden County, N. J. Smoke-stack for locomotive-engines.....	Sept. 30, 1873	890	305	4	363
139, 665	Frazier, C. E., Baltimore, Md. Feed-water heater.....	June 10, 1873	207	67	3	642
	Frazier, T. J. (See Lamb & Frazier.)					
137, 193	Frear, G. A., assignor of one-half interest to C. Holland, Chicago, Ill. Process and implements for expelling air from the composition from which artificial stone is molded.	Mar. 25, 1873	768	254	3	336
145, 411	Frearson, J., Birmingham, England. Screw.....	Dec. 9, 1873	334	112	4	624
141, 782	Frederici, C., assignor of one-half interest to E. B. Grant, New York, N. Y. Ornamental window-glass.....	Aug. 12, 1873	342	112	4	171
	Frederick, B. F. (See Scholfield, L., assignor.)					
145, 165	Frederick, H., Butler, Pa. Axle for vehicles.....	Dec. 2, 1873	117	38	4	594
5, 558	Fredericks, C. A., Brooklyn, N. Y. Speaking-tube..... (Reissue).....	Oct. 7, 1873	144	48	4	392
135, 421	Same.....	Feb. 4, 1873	26	8	3	129
141, 871	Freed, D., Philadelphia, Pa. Screw-propeller.....	Aug. 19, 1873	437	143	4	187
136, 050	Freed, W. H., assignor of one-half interest to D. M. McKnight, Sioux City, Iowa. Washing-machine.....	Feb. 18, 1873	607	200	3	201
	Freeman & Co. (See J. J. Freeman, assignor.)					
143, 568	Freeman, C., Brewster, Mass. Stay for ships' sails.....	Oct. 14, 1873	160	54	4	402
135, 793	Freeman, E. A., Moscow, Pa. Razor.....	Feb. 11, 1873	377	121	3	169
138, 745	Freeman, H., Petroleum Centre, Pa. Button and stud attachment.....	May 13, 1873	260	81	3	528
134, 878	Freeman, H. M., J. Lowe, and J. F. Stevens, Lathrop, Mo. Wheel-plow.....	Jan. 14, 1873	353	112	3	48
136, 051	Freeman, H. O., Sherburne, N. Y., assignor to H. D. Gardner, North Marksfield, Mass. Process for making cheese.....	Feb. 18, 1873	608	.....	3	201
	Freeman, J. (See Tailbouis & Renevey, assignors.)					
141, 553	Freeman, J. D., assignor to self and J. Gillespie, Abbeville, Ala. Ice-shaving machine.....	Aug. 5, 1873	124	39	4	145
136, 594	Freeman, J. J., assignor to Freeman & Co., Attleborough, Mass. Link for ornamental chains.....	Mar. 11, 1873	231	78	3	273
144, 754	Freeman, S. B., Fort Wayne, Ind. Bed-bottom.....	Nov. 18, 1873	507	172	4	542
	Freeman, W. A. (See Jones, J., assignor.)					
	Same..... (See Quimby, A. P., assignor.)					
135, 328	Freeman, W. A., jr., Newark, N. J. Sad-iron.....	Jan. 28, 1873	779	252	3	110
136, 430	Freimuth, H., and A. Büttner, Aachen, Prussia. Machine for grooving sewing-machine needles.....	Mar. 4, 1873	64	23	3	250
145, 793	Frémaux, L. J., New Orleans, La. Piano and organ attachment.....	Dec. 23, 1873	687	225	4	677
142, 386	French, C. A., Davenport, Iowa. Piano-truck.....	Sept. 2, 1873	60	20	4	247
145, 058	French, C. G., Springfield, Ill. Dental forceps.....	Dec. 2, 1873	17	6	4	587
145, 291	French, D. B., Grafton, Vt. Wheel for vehicles.....	Dec. 9, 1873	231	78	4	616
138, 324	French, E. F., New York, N. Y. Binding for sewing-machine covers.....	Apr. 29, 1873	989	311	3	479
135, 107	French, E. S., assignor to F. S. Coolidge, Westminster, Mass. Clothes-drier.....	Jan. 21, 1873	562	183	3	80

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 241	French, J. C., Chicago, Ill. Vault-cover.....	May 27, 1873	722	228	3	587
144, 271	French, J. S., Alexandria, Va. Locomotive.....	Nov. 4, 1873	85	28	4	485
	French, J. W., et al. (See Ross & Miller, assignors.)					
	French, J. W., et al. (See Ross, J. G., assignor.)					
145, 561	French, R., Seymour, Conn. Machine for making ox-shoes.....	Dec. 16, 1873	479	157	4	648
138, 877	French, S., and R. D. Chase, Orange, Mass. Copy-holder.....	May 13, 1873	376	117	3	538
	French, W. H. (See Dreyer, B., assignor.)					
	Frenier, O. H. (See Adams, J., assignor.)					
134, 595	Frerichs, W. C. A., Tottenville, N. Y. Snow-ram for railways.....	Jan. 7, 1873	90	28	3	14
	Freund, A. (See Hinden, M. J., assignor.)					
139, 139	Frey, F. E., assignor to Frey, Sheckler & Co., Bucyrus, Ohio. Saw-sharpening machine.....	May 20, 1873	615	192	3	571
138, 626	Frey, J. A., Jersey City, N. J. Soldering-furnace.....	May 6, 1873	139	45	3	509
	Frey, Sheckler & Co. (See Frey, F. E., assignor.)					
138, 325	Frick, A. O., Waynesborough, Pa. Balanced slide-valve.....	Apr. 29, 1873	989	311	3	479
136, 231	Friday, R., Crockett, Tex. Seed-planter.....	Feb. 25, 1873	776	251	3	226
135, 422	Fridley, J., jr., Carlisle, Pa. Hot-air furnace.....	Feb. 4, 1873	27	8	3	129
	Friedman, N., et al. (See Hoffman, A. D., assignor.)					
	Friedrich, J. (See Kept, A., assignor.)					
139, 140	Friel, W., San Francisco, Cal. Lamp-heater.....	May 20, 1873	617	193	3	571
144, 755	Friest, J. P., Chillicothe, Mo. Churn.....	Nov. 18, 1873	507	172	4	542
142, 908	Frink, C. L., Rockville, Conn. Rubber compound for the manufacture of packing, &c.....	Sept. 16, 1873	520		4	307
	Frink, E. O. (See Smith & Frink.)					
	Frink, M. S. (See Manning, I., assignor.)					
140, 357	Frisbee, G., Pottsville, Pa. Guide and core-barrel for revolving rock-drills.....	July 1, 1873	20	7	4	9
6, 619	Frisbie, R., assignor to the J. and E. Stevens Company, Cromwell, Conn. Toy savings-bank.....	Apr. 29, 1873			3	471
	Same..... Toy money-box.....	July 1, 1873	21	7	4	10
140, 358	Friscia, F. A., Brooklyn, N. Y. Food or sauce.....	Dec. 16, 1873	480		4	648
145, 562	Fritsch, J. W., Cincinnati, Ohio. Coupling for tubular lightning-rods.....	Dec. 16, 1873	546	179	4	654
145, 641	Fritts, C. E., assignor to J. S. Fritts, Oneonta, N. Y. Curtain-fixture.....	May 6, 1873	21	8	3	499
138, 493	Fritts, J. S. (See Fritts, C. E., assignor.)					
	Fritz, G. (See Fritz, J. and G.)					
145, 156	Fritz, G., deceased, by J. Fritz, J. McMiller, and W. R. Tucker, executors, Johnstown, Pa. Process of utilizing old railway-rails.....	Dec. 2, 1873	118	39	4	595
	Fritz, J., executor. (See Fritz, G.)					
	Fritz, J., Bethlehem, and G. Fritz, Johnstown, Pa. Rolling-mill..... (Extension.)	Sept. 27, 1873			4	321
139, 566	Fritz, J., and W. C. Pooley, Memphis, Tenn. Machine for introducing water and gas pipes.....	June 3, 1873	105	35	3	617
	Fritzche, C. O. H. (See Macdonald & Fritzche.)					
140, 359	Frizell, C., Boston, Mass. Step-ladder.....	July 1, 1873	22	7	4	10
140, 578	Same..... same.....	July 8, 1873	217	72	4	37
145, 642	Frontier, P., and A. Bellemere, San Francisco, Cal. Watch-chain.....	Dec. 16, 1873	548	180	4	654
145, 859	Froshang, J. O., Albert Lea, Minn. Coloring and preserving wood to imitate slate.....	Dec. 23, 1873	743		4	682
	Frost, A. H. (See Ames & Frost.)					
	Frost, A. H., et al. (See Moody, W. F., assignor.)					
137, 299	Frost, E. W., Brooklyn, N. Y. Rubber eraser.....	Apr. 1, 1873	18	6	3	358
	Frost, G. (See Dobson, R. F., assignor.)					
140, 026	Frost, J. B., Jackson, Mich. Fastener for sashes and doors.....	June 17, 1873	537	170	3	675
143, 620	Frost, L. C., Fredericksburgh, Va. Plow.....	Oct. 14, 1873	208	70	4	406
137, 356	Frost, R. W., New York, N. Y. Wardrobe-bedstead.....	Apr. 1, 1873	72	23	3	363
136, 232	Frost, T., Piermont, N. Y. Sash fastener and tightener.....	Feb. 25, 1873	777	251	3	226
	Fry, H. R. (See Wagner & Fry.)					
145, 794	Fry, J. W., Panama, Colombia. Nipper for twisting wire.....	Dec. 23, 1873	688	226	4	677
144, 328	Fry, M. W., Guyandotte, W. Va. Removing acids from leather.....	Nov. 4, 1873	129		4	489
145, 343	Fry, W. T., Brooklyn, N. Y. Combined shutter and window fastener.....	Dec. 9, 1873	278	93	4	620
136, 052	Frye, J., Brooklyn, N. Y. Endless rolling-gear for railways.....	Feb. 18, 1873	609	200	3	201
136, 053	Same..... Wheel for endless railways.....	Feb. 18, 1873	610	200	3	201
136, 054	Same..... Platform-carrier for endless railways.....	Feb. 18, 1873	611	200	3	201
135, 794	Fryer, R. M., Nashville, Tenn., assignor of one-half interest to G. W. Saulpaw. Cut-off and reversing valve-gear for engines.....	Feb. 11, 1873	377	{ 121 } { 122 }	{ 3 } { 3 }	169 169
135, 795	Same..... Valve-gear and connection for steam and other engines.....	Feb. 11, 1873	378	122	3	169
135, 796	Same..... Valve-gear for engines.....	Feb. 11, 1873	379	122	3	169
	Fryer, W. J., jr. (See Johnson, G. H., assignor.)					
141, 215	Fryer, W. J., jr., and G. H. Johnson, said Johnson assignor to said Fryer, New York, N. Y. Fire-proof Mansard roofs.....	July 29, 1873	822	269	4	111
	Fuchs, J. (See Boeklen, R., assignor.)					
140, 493	Fulghum, J. P., and L. L. Lawrence, assignors to Wayne Agricultural Company, Dublin, Ind. Corn-planter.....	July 1, 1873	127	44	4	19
140, 694	Fulghum, J. P., assignor to self and Wayne Agricultural Company, Dublin, Ind. Grass-seed attachment to grain-drills.....	July 8, 1873	315	107	4	45
145, 795	Same..... Grain-drill.....	Dec. 23, 1873	689	226	4	677
	Fulghum, W. (See Garretson & Fulghum.)					
5, 701	Fullam, A. J., Springfield, Vt., assignor to W. Earl, jr., J. G. Blunt, R. T. Smith, and J. K. Priest. Device for shearing sheep..... (Reissue.)	Dec. 24, 1873	815	266	4	687
	Fuller, C. S. (See Burdick & Fuller.)					
144, 329	Fuller, C. S., Oswego, New York. Middlings-purifier.....	Nov. 4, 1873	129	43, 44	4	489
	Fuller, E. P. (See Wells, W., assignor.)					
145, 938	Fuller, G. H., Pawtucket, R. I. Manufacture of catches for jewelers' use.....	Dec. 30, 1873	837	272	4	700
6, 677	Fuller, L. K., assignor to J. Estey & Co., Brattleborough, Vt. Organ-case..... (Design.)	May 27, 1873			3	586
6, 678	Same..... Ends of an organ..... (Design.)	May 27, 1873			3	586
139, 666	Same..... Reed-organ.....	June 10, 1873	207	68	3	642
142, 690	Same..... same.....	Sept. 9, 1873	329	110	4	280
140, 695	Fuller, O. B., Newark, N. J. Dough-machine.....	July 8, 1873	315	107	4	45
144, 666	Same..... Machine for sheeting dough.....	Nov. 18, 1873	431	146	4	536
141, 216	Fuller, S. B., Lynn, Mass. Die for molding shoe-soles.....	July 29, 1873	823	269	4	111
144, 527	Fuller, W. M., New York, N. Y. Steam-heater.....	Nov. 11, 1873	307	103	4	515
145, 167	Same..... same.....	Dec. 2, 1873	118	39	4	595
	Fullerton, J. M., et al. (See Moody, B. D., assignor.)					
135, 108	Fullgraff, L. A., New York, N. Y. Packing-box.....	Jan. 21, 1873	562	183	3	81
137, 357	Fulton, J. G., Toledo, Ohio. Feeder and filter for boilers.....	Apr. 1, 1873	73	24	3	363
142, 784	Fulton, J. R., West Mahoning Township, Pa. Stove-pipe thimble.....	Sept. 16, 1873	422	142	4	298
135, 216	Funck, S., Quincy, Ill. Wood-sawing machine.....	Jan. 28, 1873	678	219	3	102
140, 408	Fuqua, A., Woodville, Ky. Medical compound.....	July 1, 1873	58		4	13
141, 709	Fuqua, A. W., Sandford, Ind. Churn.....	Aug. 12, 1873	274	89	4	165

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
146, 059	Furbush, C. A. (See Furbush, M. A., assignor.)					
	Furbush, M. A., assignor to self and C. A. Furbush, Philadelphia, Pa. Spindle-whorl for spinning-machines.	Dec. 30, 1873	943	304	4	708
144, 611	Furlong, E. P., Springfield, Mass. Collar and cuff.	Nov. 14, 1873	387	130	4	533
138, 627	Furness, J. C., Boston, Mass. Metallic packing for piston-rods, &c.	May 6, 1873	139	45	3	509
144, 667	Furr, A. J., and W. C. Knaus, Boonsborough, Mo. Shaving-mug.	Nov. 18, 1873	432	146	4	536
140, 409	Fyfe, R., New York, N. Y. Rotary hog-scraper.	July 1, 1873	58	21	4	13
	Gabel, J. H. (See Fowlds, T., jr., assignor.)					
142, 623	Gable, P., Elizabeth, Ill. Sled-brake.	Sept. 9, 1873	274	90	4	276
136, 499	Gaches, J. H., Atlanta, Ga. Combined putty-knife and sprig-box.	Mar. 4, 1873	128	41	3	256
144, 668	Gaddy, N. W., Nichols, S. C. Cotton-gin.	Nov. 18, 1873	432	146	4	536
137, 431	Gaffey, W., Philadelphia, Pa. Velocipede.	Apr. 1, 1873	136	44	3	368
137, 133	Gafney, M., Newark, N. J. Core for casting stench-traps.	Mar. 25, 1873	711	236	3	332
138, 628	Gage, D. H., Dover, N. H. Pug-mill.	May 6, 1873	140	46	3	509
146, 060	Gage, E. C., Witoka, Minn. Corn-planter.	Dec. 30, 1873	944	304	4	708
138, 629	Gaggin, R., Erie, Pa. Deodorizing oils obtained from acid-tar of oil-refineries.	May 6, 1873	142		3	509
137, 542	Gahn, H., Upsala, Sweden. Medical compound.	Apr. 8, 1873	247		3	388
5, 706	Gahren, C., assignor to M. Cohn, New York, N. Y. Take-up for looms. (Reissue).	Dec. 23, 1873	221	267	4	688
144, 756	Gahren, C., New York, N. Y. Take-up mechanism for looms.	Nov. 18, 1873	508	172	4	542
138, 391	Gahren, C., and L. Langlotz, assignors to M. Cohn, New York, N. Y. Let-off mechanism for looms.	Apr. 29, 1873	1,040	328	3	483
136, 910	Gaillard, T., Brooklyn, N. Y. Turn-buckle.	Mar. 18, 1873	505	167	3	304
136, 987	Gaines, L. J., assignor to C. Parker, West Meriden, Conn. Cartridge-holder.	Mar. 18, 1873	570	190	3	309
140, 027	Gaisberg, F., New York, N. Y. Spittoon.	June 17, 1873	538	170	3	675
140, 028	Galand, C. F., Paris, France. Frame and stock for revolving fire-arms.	June 17, 1873	538	170	3	676
139, 054	Gale, D. T., Fort Wayne, Ind. Nut and coffee roaster.	May 30, 1873	532	168	3	564
140, 131	Gale, J. A., West Medway, Mass. Car-coupling.	June 24, 1873	553	205	3	693
	Gale, L. D., Washington, D. C. Apparatus for the manufacture of gas. (Extension).	Nov. 8, 1873			4	504
	Same. Manufacture of gas. (Extension).	Nov. 8, 1873			4	504
140, 029	Gale, M. F., New York, N. Y. Vapor-burner.	June 17, 1873	539	171	3	676
140, 930	Same. same.	June 17, 1873	540	171	3	676
135, 109	Gallagher, M. I., Savannah, Ga. Automatic dental-drill.	Jan. 21, 1873	563	183	3	81
137, 066	Gallagher, B., Saint John, Canada, and J. Coyle, Belfast, Great Britain. Sole-trimming machine.	Mar. 25, 1873	652	216	3	327
137, 432	Gallagher, B., Saint John, Canada. Ratchet-drill.	Apr. 1, 1873	137	45	3	368
136, 988	Gallagher, C. H., Gloucester, Mass. Lizard for sails.	Mar. 18, 1873	570	190	3	309
143, 005	Gallagher, D., Cincinnati, Ohio. Core-bar for casting.	Sept. 23, 1873	610	207	4	324
	Gallagher, J., et al. (See Lee, J., assignor.)					
	Same. (See Smith & Lee, assignors.)					
144, 085	Gallagher, J. M., Carthage, N. Y. Composition for preserving dead bodies.	Oct. 28, 1873	657		4	462
141, 131	Gallagher, J. P., Saint Louis, Mo. Fire-plug.	July 22, 1873	726	241	4	95
139, 711	Gallet, J. G., Saint Augustine, Ill. Traction-wheel.	June 10, 1873	255	80	3	645
144, 450	Galloway, J., New York, N. Y. Type-writing machine.	Nov. 11, 1873	241	81, 82	4	509
5, 492	Gallup, W. H., Troy, N. Y. Dress-facing. (Reissue).	July 15, 1873	595	200	4	76
138, 326	Same. Dress-facing.	Apr. 29, 1873	990	311	3	479
135, 423	Gally, M., Rochester, N. Y. Governor.	Feb. 4, 1873	28	8	3	130
136, 369	Same. Printing-telegraphs.	Mar. 4, 1873	14	5, 6	3	246
138, 241	Same. Machine for distributing type.	Apr. 29, 1873	905	285	3	473
143, 340	Same. Circuit-closer and circuit for multiplex or interval telegraphs.	Sept. 30, 1873	891	305	4	363
143, 341	Same. Multiplex or interval telegraphs.	Sept. 30, 1873	894	{ 305 } { 306 }	{ 4 }	363
	Galpin, T. D., et al. (See Dawson, A. and H. T., assignors.)					
138, 746	Galt, T., Rock Island, Ill. Child's carriage.	May 13, 1873	260	81	3	528
143, 818	Same. same.	Oct. 21, 1873	406	135	4	431
5, 233	Galt, T. A., and G. S. Tracy, Sterling, Ill. Stalk-cutter. (Reissue).	Jan. 14, 1873	434	138	3	54
140, 031	Same. Corn-planter.	June 17, 1873	540	171	3	676
	Galway, Semple & Co. (See Semple, W. G., assignor.) (Design.)					
141, 872	Gamber, J., Petersburg, Pa. Ballot box.	Aug. 19, 1873	438	143	4	188
	Gamewell & Co. (See Wright, Holley & Miles, assignors.)					
138, 878	Gammel, C., Utica, N. Y. Curtain-cord fastener.	May 13, 1873	377	118	3	538
139, 567	Same. Spring bed-bottom.	June 3, 1873	107	36	3	617
136, 500	Ganong, L. M., Friar's Point, Miss. Cultivator.	Mar. 4, 1873	128	41	3	256
139, 950	Garaud, J., New York, N. Y. Hunting-jacket.	June 17, 1873	475	149	3	670
135, 641	Garcia, J. E., New York, N. Y. Rotary sail.	Feb. 11, 1873	242	76	3	159
145, 796	Gard, W. J., Winona, Minn. Scrubbing-machine.	Dec. 23, 1873	690	226	4	677
142, 909	Gardner, G. H., Nokomis, Ill. Chimney-cowl.	Sept. 16, 1873	521	177	4	307
134, 743	Gardner, P. G., New York, N. Y. Railway-car truck.	Jan. 14, 1873	236	76	3	39
144, 201	Same. Volute spring.	Nov. 4, 1873	26	8	4	480
	Gardner, S., jr. (See Mott & Gardner.)					
	Gardner, A. (See Simpson & Gardner.)					
145, 860	Gardner, A. P., Moscow, Pa. Fermentation-guard for barrels, &c.	Dec. 23, 1873	743	243	4	682
137, 671	Gardner, C. A., and J. A. Enos, Peabody, Mass. Carrier's tool.	Apr. 8, 1873	358	111	3	397
	Gardner, D. P. (See Bliss, F. D., assignor.)					
	Gardner, D. P., et al. (See Hammond, J. E., assignor.)					
	Gardner, E., et al. (See Moore, S., assignor.)					
	Gardner, E. M. (See Cox, C. A., assignor.)					
	Gardner, G., et al. (See Gardner, W., assignor.)					
142, 624	Gardner, G., Glen Gardner, N. J., assignor of two-thirds interest to O. L. and W. Gardner. Chair seat and back.	Sept. 9, 1873	274	90	4	276
142, 625	Gardner, G., Glen Gardner, N. J., assignor of one-half interest to O. L. Gardner. Chair-frame.	Sept. 9, 1873	275	90	4	276
	Gardner, G. A. (See Quick & Gardner.)					
	Gardner, G. W., Troy, N. Y. Molding covers for cooking-stoves. (Extension).	Feb. 22, 1873			3	156
	Gardner, H. D. (See Freeman, H. O., assignor.)					
	Gardner, H. W. (See Baker, A. E., assignor.)					
	Gardner, L., 2d. (See Haynes, C. E., assignor.)					
140, 696	Gardner, O., New York Mills, N. Y. Meat-chopper.	July 8, 1873	316	107	4	45
	Gardner, O. L. (See Gardner, W., assignor.)					
	Gardner, O. L., et al. (See Gardner, W., assignor.)					
139, 055	Gardner, R. W., Quincy, Ill. Governor.	May 20, 1873	533	169	3	564
142, 846	Same. Governor for steam-engines.	Sept. 16, 1873	471	159	4	302
144, 330	Gardner, S., New York, N. Y. Ore-pulverizer.	Nov. 4, 1873	130	44	4	489
134, 657	Gardner, T. W., assignor of one-half interest to H. J. Keeler, Terre Haute, Ind. Lamp-burner.	Jan. 7, 1873	148	47	3	18
	Gardner, W. (See Gardner, G., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 568	Gardner, W., assignor of two-thirds interest to O. L. and G. Gardner, Glen Gardner, N. J. Chair	June 3, 1873	107	36	3	617
142, 225	Garfield, C. L., Albany, N. Y. Revolving chimney-top	Aug. 26, 1873	757	249	4	223
140, 410	Garland, J. G., Biddeford, Me. Apparatus for moistening the atmosphere	July 1, 1873	59	21	4	13
136, 989	Garlington, J. E., Chambers Court-House, Ala. Portable fence	Mar. 18, 1873	571	190	3	309
140, 621	Garlington, J. L., Snapping Shoals, Ga. Fire-place	July 8, 1873	255	86	4	40
135, 704	Garlington, T. C., La Fayette, Ala. Seed-planter	Feb. 11, 1873	300	95	3	163
135, 472	Garlock, D. G., White Cloud, Kans. Harness-maker's gage	Feb. 4, 1873	73	23	3	133
	Garlock, J. (See Bartle & Garlock.)					
	Garman, S. J. (See Wishart, T., assignor.)					
	Garner, H. B. (See Gish, D. J., assignor.)					
139, 569	Garnham, A., Saint Louis, Mo. Device for removing sand-bars in rivers	June 3, 1873	108	36	3	618
142, 331	Garnhart, J. H., Madison, Wis. Binder's attachment for harvesters	Sept. 2, 1873	8	3	4	243
143, 505	Same. same.	Oct. 7, 1873	90	31	4	388
145, 344	Garnsey, J. C., New York, N. Y. Urinal	Dec. 9, 1873	278	93	4	620
140, 770	Garratt, A. C., Boston, Mass. Railway-switch	July 15, 1873	381	131	4	59
5, 328	Garratt, W. T., San Francisco, Cal. Lubricator (Reissue)	Mar. 18, 1873	627	207	3	314
138, 630	Garretson, E. K., and W. Fulghum, Winchester, Ind. Bed-bottom	May 6, 1873	143	46	3	509
143, 233	Garretson, J. C., Marshland, N. Y. Wheel for vehicles	Sept. 30, 1873	800	276	4	356
145, 797	Garretson, O. S., Buffalo, N. Y. Blind-hinge	Dec. 23, 1873	691	226	4	677
146, 061	Garrett, J. M., Brenham, Tex. Cotton-chopper	Dec. 30, 1873	945	304	4	708
	Garrison, H. W. (See Wall, W. H., assignor.)					
	Garrison, J., et al. (See Clifford, W. P., assignor.)					
	Garrison, L., et al. (See Clifford, W. P., assignor.)					
6, 742	Garrison, S., Baltimore, Md. Picture-frame molding (Design)	July 1, 1873			4	8
137, 672	Garsed, G. L., Wilmington, Del. Beam and roller for looms	Apr. 8, 1873	359	111	3	397
134, 435	Garsed, R., Philadelphia, Pa. Spindle and bobbin for spinning-frames	Jan. 7, 1873	30	10	3	9
143, 006	Garsed, R. P., Norristown, and J. D. Buck, Philadelphia, Pa., said Buck assignor to said Garsed. Feed and blow-off for steam-boilers	Sept. 23, 1873	610	207	4	324
134, 986	Garside, J. E., Hennepin, Ill. Hand-seeder	Jan. 21, 1873	459	147	3	72
136, 501	Gartenmann, A., New York, N. Y. Loom-shuttle motion	Mar. 4, 1873	129	42	3	256
	Garvin, H. R. (See Smith, J. D., assignor.)					
142, 332	Gascoigne, J., Rochester, N. Y. Insole for boots and shoes	Sept. 2, 1873	10	4	4	243
137, 771	Gash, G. W., and C. L. Owens, Clinton, Ill. Corn-husking thimble	Apr. 15, 1873	460	144	3	419
144, 973	Gaskell, J., Bridgeport, assignor to Colt's Patent Fire-arm Manufacturing Company, Hartford, Conn. Safety appliance for governors	Nov. 25, 1873	698	235	4	569
136, 148	Gaskill, H. C., Mount Holly, N. J., assignor to Hay & Co., Philadelphia, Pa. Fruit-jar	Feb. 25, 1873	714	230	3	221
144, 974	Gaspary, F. R., Berlin, Prussia. Needle-threader	Nov. 25, 1873	698	236	4	569
137, 673	Gaston, H. A., San José, Cal. Spring-mattress	Apr. 8, 1873	360	112	3	398
	Gately, D. C., Newtown, Conn. Making rubber-belt (Extension)	Nov. 22, 1873			4	531
	Same. Rubber-belt (Extension)	Nov. 22, 1873			4	531
140, 494	Same. Plate for vulcanizing belting, hose, &c	July 1, 1873	129	44	4	19
141, 433	Gately, D. C., Newton, Conn., and J. B. Forsyth, Boston, Mass. Apparatus for the manufacture of vulcanized rubber-belt	Aug. 5, 1873	20	6	4	136
135, 902	Gates, A., Burnside, Ill. Scaffold	Feb. 18, 1873	485	157	3	191
135, 705	Gates, J., Saint Louis, Mo. Bridge	Feb. 11, 1873	300	95	3	163
138, 243	Gates, J., Portland, Oreg. Lubricator	Apr. 29, 1873	907	286	3	473
	Gates, J. H. (See Kilburn, C., assignor.)					
136, 431	Gates, J. P., Red River County, Texas. Lever for presses	Mar. 4, 1873	67	24	3	251
136, 911	Gates, L., Pleasant Hill, Mo. Moth-trap for bee-hives	Mar. 18, 1873	506	167	3	304
138, 747	Gates, L., Mount Vernon, Ohio. Portable fence	May 13, 1873	261	81	3	528
144, 897	Gates, O., Columbus, Ohio. Reversible center-pinion for watches	Nov. 25, 1873	635	216	4	564
138, 242	Gates, S. F., Cambridge, Mass. Car-axle box	Apr. 29, 1873	906	286	3	473
	Gates, W. (See Caple & Gates.)					
	Gates, W., et al. (See Haver, W. W., assignor.)					
144, 898	Gathmann, L., Chicago, Ill. Blind-hinge	Nov. 25, 1873	636	216	4	564
136, 370	Gathright, J. B., Louisville, Ky. Harvester-dropper	Mar. 4, 1873	18	6	3	247
145, 292	Same. Machine for punching, splitting, and creasing bridles	Dec. 9, 1873	252	78	4	616
145, 563	Gatling, R. J., Hartford, Conn. Traversing mechanism for machine guns	Dec. 16, 1873	481	157	4	648
139, 056	Gatty, F. A., Acerrington, England. Dyeing madder colors	May 20, 1873	535		3	564
141, 132	Gauduin, O., J. B. J. Mignon, and S. H. Rouart, Paris, France. Coating metals with copper	July 22, 1873	727		4	95
134, 658	Gault, G. E., and A. W. Winall, assignors to Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer	Jan. 7, 1873	149	47	3	18
	Gault, T. B., et al. (See Snyder, J. H., assignor.)					
139, 780	Gaunt, J. F., assignor of one-half interest to E. B. Knott, Newark, N. J. Conductor's check-box	June 10, 1873	322	100	3	650
143, 069	Gaver, C. P., Ashland, Ky. Barge-pump	Sept. 23, 1873	664	228	4	328
146, 697	Gay, A. E., Nashua, N. H. Glass piston and packing for pumps	July 8, 1873	316	107	4	45
	Gay, J. (See Kerr, H. S., assignor.) (Design)					
	Same. (See Knight, H., assignor.) (Design)					
	Same. (See Righter, C., assignor.) (Design)					
135, 270	Gaylord, E. L., Bridgeport, Conn. Lock for sewing-machines	Jan. 28, 1873	728	233	3	106
	Gaylord Manufacturing Company. (See Payne, S. F., assignor.)					
139, 309	Gazley, J. F., Canyonville, Oreg. Harrow	May 27, 1873	784	249	3	592
135, 642	Gear, A. S., Boston, Mass. Machine for cutting stone	Feb. 11, 1873	243	77	3	159
136, 432	Same. Machine for turning stone	Mar. 4, 1873	68	24	3	251
142, 096	Same. Stone-channeling machine	Aug. 26, 1873	651	214	4	214
137, 067	Gearhart, C. H., Farmer City, Ill. Car-coupling		653	216	3	328
	Gearhart, J. R. (See McKimm & Gearhart.)					
140, 264	Gearing, C., assignor of four-eighths interests to G. M. Irwin, C. Walters, and N. Milligan, Pittsburgh, and S. B. Row, Clearfield, Pa. Manufacture of illuminating gas	June 24, 1873	762	{ 240 } { 241 }	{ 3 } { 4 }	702
143, 688	Gebhardt, J. B., and C. G. Schwarz, Philadelphia, Pa. Heel for boots, &c	Oct. 14, 1873	269	89	4	410
	Gebhardt, C., jr. (See Wirtz & Gebhardt.)					
135, 983	Geemen, J., New York, N. Y. Medical compound or rheumatic ointment	Feb. 18, 1873	549		3	196
137, 194	Same. Kiln for drying malt, &c	Mar. 25, 1873	769	254	3	336
134, 879	Geddes, W. B., Rochester, N. Y. Hot-air furnace	Jan. 14, 1873	354	{ 112 } { 113 }	{ 3 } { 4 }	48
140, 360	Gedies, A., New York, N. Y. Smoking-tube	July 1, 1873	22	7	4	10
141, 640	Gee, M., Oakland, Cal. Fastener for the meeting-rails of sashes	Aug. 12, 1873	217	69	4	160
134, 880	Gee, W., New York, N. Y. Sirup-device for soda-fountains	Jan. 14, 1873	355	113	3	49
137, 195	Same. Dispensing apparatus for soda-water	Mar. 25, 1873	770	254	3	336
138, 143	Same. Soda-water and sirup cock	Apr. 22, 1873	793	253	3	455
141, 133	Same. Cooler for soda-water, &c	July 22, 1873	727	241	4	96
143, 689	Same. Cooling-coil for liquids	Oct. 14, 1873	270	89	4	411

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
144, 086	Gee, W., New York, N. Y. Apparatus for dispensing soda and mineral waters.....	Oct. 28, 1873	658	217	4	462
142, 158	Geer, D. L., Lake City, Fla. Rice-cleaner.....	Aug. 26, 1873	703	232	4	219
136, 371	Geer, G., Plainville, Conn. Door-spring.....	Mar. 4, 1873	19	7	3	247
	Gehring, J. D. (See Lehman, D. A., assignor.)					
142, 847	Geiger, C., Philadelphia, Pa. Street-sweeper.....	Sept. 16, 1873	472	160	4	302
142, 012	Geiger, G. L., Philadelphia, Pa. Till-alarm.....	Aug. 19, 1873	551	182	4	197
141, 783	Geiser, P., Waynesborough, Pa. Thrashing-machine.....	Aug. 12, 1873	342	113	4	171
143, 897	Geisinger, N. A., Coopersburgh, Pa. Bag-holder.....	Oct. 21, 1873	472	158	4	437
141, 784	Geisler, K., assignor to self and J. Lertora, New York, N. Y. Folding-chair.....	Aug. 12, 1873	343	113	4	171
	Geller, C. C. (See Shepard, G. L., assignor.)					
137, 909	Gense, C., Foulloy, assignor to G. P. Lanier, Paris, France. Bed-bottom.....	Apr. 15, 1873	577	181	3	428
143, 342	Gentry, J. J., and J. F. Collett, Corinth, Miss. Swinging-gate.....	Sept. 30, 1873	900	306	4	364
	George, C. P. (See George, R. W., assignor.)					
136, 149	George, E. M., Three Rivers, Mich. Adjustably hinged gate.....	Feb. 25, 1873	714	231	3	221
137, 358	George, J. S., and W. Houghtaling, Bridgeport, Conn. Machine for cutting cam-grooves.....	Apr. 1, 1873	74	24	3	363
135, 903	George, R. W., Boston, Mass. Machine for jointing staves.....	Feb. 18, 1873	486	157	3	191
139, 242	George, R. W., assignor to C. P. George, Boston, Mass. Machine for jointing and planing staves.....	May 27, 1873	723	228	3	587
	George, W. (See Moore, George & Holley.)					
139, 000	George, W., and W. F. Durfee, Philadelphia, Pa. Machinery for rolling metal.....	May 20, 1873	487	154	3	561
	George, W. E. (See Brown, D., assignor.)					
141, 502	Geraghty, J., Jersey City, N. J. Terret and martingale ring.....	Aug. 5, 1873	83	26	4	142
143, 070	Gerard, J. N., New York, N. Y. Atomizer or vaporizer.....	Sept. 23, 1873	664	228	4	328
137, 772	Gerau, G. W., Brooklyn, N. Y. Awning.....	Apr. 15, 1873	461	144	3	419
5, 669	Gerdes, F. W., Allegheny City, Pa. Manufacture of paints..... (Reissue)	Nov. 25, 1873	762		4	575
	Gerhard, D. (See Ahrens & Gerhard.)					
137, 359	Gerhard, S., Camden, N. J. Propelling vessels.....	Apr. 1, 1873	74	24	3	363
136, 502	Gerhardt, C. C., Wyandotte, Kans. Car-ventilator.....	Mar. 4, 1873	130	42	3	256
135, 110	Gerike, H., Berlin, Prussia, assignor to B. Harrass, Böhlen, Germany. Device for making cigarettes.....	Jan. 21, 1873	564	183	3	81
	Gerkhardt, W. (See Eltonhead, G. W., assignor.)					
	Germain, C. (See Dodge, H., assignor.)					
143, 008	Gerner, H., New York, N. Y. Steam-engine cylinder.....	Sept. 23, 1873	612	208	4	324
143, 009	Same..... Fly-wheel.....	Sept. 23, 1873	613	208	4	324
143, 007	Gerner, R., New York, N. Y. Steam-generator.....	Sept. 23, 1873	611	208	4	324
135, 706	Gernsey, M., Middlebury, N. Y. Fire-kindler.....	Feb. 11, 1873	302		3	163
134, 436	Gerrish, W. H., Boston, Mass. Reed-organ.....	Jan. 7, 1873	31	10	3	10
137, 433	Gerry, E., Garden City, Minn. Bee-hive.....	Apr. 1, 1873	138	45	3	368
139, 141	Gerry, J. H., Boston, Mass. Music-leaf turner.....	May 20, 1873	618	193	3	571
	Gervis, F. X. (See Spencer, J. C., assignor.)					
142, 387	Getchell, W., Bath, Me. Combined wardrobe, bedstead, chair, and table.....	Sept. 2, 1873	61	20	4	247
140, 032	Getty, G. B., assignor to self, E. Mendenhall, and E. Barton, Bloomsburgh, Pa. Head-block for saw-mills.....	June 17, 1873	541	171	3	676
138, 631	Geyser, J. B., Pittsburgh, Pa. Music-leaf turner.....	May 6, 1873	144	47	3	509
138, 015	Gheen, J. W., Wilmington, Del. Molding-machine.....	Apr. 22, 1873	682	216	3	446
141, 217	Ghirardini, M. L., Providence, R. I. Rail for street railways.....	July 29, 1873	823	269	4	111
	Giant Powder Company. (See Judson, E., assignor.)					
	Giant Powder Company et al. (See Nobel, A., assignor.)					
	Giant Powder Company. (See Nobel, A., assignor.)					
	Giant Powder Company et al. (See Varney, Y., assignor.)					
145, 100	Gibbins, J., Springfield, Mass. Shaft-coupling.....	Dec. 2, 1873	57	18	4	590
140, 132	Gibbons, R. J., Saint Louis, Mo. Railway-tank feeder.....	June 24, 1873	654	205	3	693
142, 333	Gibbons, S., Freedom, Pa. Steam air-pump and condenser.....	Sept. 2, 1873	10	4	4	243
	Gibbons, W. (See Metcalf & Gibbons.)					
138, 879	Gibbs, A. H., Norwalk, Conn. Shutter-worker.....	May 13, 1873	377	118	3	538
145, 644	Gibbs, A. W., Norwich, Conn. Automatic catch for sliding doors.....	Dec. 16, 1873	549	180	4	654
136, 830	Gibbs, G., Canton, Ohio. Brace-drill.....	Mar. 18, 1873	440	146	3	299
139, 463	Gibbs, G. H., Nunda, N. Y. Piston-valve.....	June 3, 1873	18	6	3	610
5, 329	Gibbs, I., Worcester, Mass. Stock for holding cutters in planing-machines.. (Reissue)	Mar. 18, 1873	627	207	3	314
	Gibbs, J., et al. (See Hinman, W. W., assignor.)					
137, 134	Gibbs, J., Opelousas, La. Locomotive spark-arrester.....	Mar. 25, 1873	711	236	3	332
142, 910	Gibbs, J., Fremont, Ohio. Fence-post.....	Sept. 16, 1873	521	177	4	307
5, 421	Gibbs, L., Canton, Ohio, assignor to self, J. R. Bucher, and W. A. Wikidal. Plow. (Reissue)	May 20, 1873	705	221	3	578
145, 643	Gibbs, L., assignor to self and H. Hudson, Fremont, Ohio. Saw-gummer.....	Dec. 16, 1873	548	180	4	654
137, 910	Gibbs, P. L., Chicago, Ill. Railway-track wrench.....	Apr. 15, 1873	578	181	3	428
146, 062	Same..... Annular leather-washer.....	Dec. 30, 1873	945	305	4	708
139, 381	Gibbs, R., Spring Hill, Mo. Clevis bar and hook.....	May 27, 1873	839	268	3	597
142, 455	Gibbs, R., assignor to self and S. E. Gibbs, Spring Hill, Mo. Tire-upsetting machine.....	Sept. 2, 1873	118	38	4	252
	Gibbs, S. E. (See Gibbs, R., assignor.)					
	Gibbs, Sterrett & Co. (See Van Syckel, S., assignor.)					
134, 659	Gibbs, W. A., Sewardstone, and A. Borwick, London, England. Dryer.....	Jan. 7, 1873	150	{ 48 49 50 }	3	18
140, 495	Giblin, J., Boston, assignor to self and H. K. Hines, East Boston, Mass. Saw-attach-ment.....	July 1, 1873	130	44	4	19
135, 217	Gibson, C. T., Baltimore, Md. Sash lock.....	Jan. 28, 1873	679	219	3	102
	Gibson, D., et al. (See Lowrie, H. C., assignor.)					
	Gibson, J. (See Beckmann & Gibson.)					
144, 331	Gibson, J. S., Martinsburgh, W. Va. Combined condenser and feed-water apparatus.....	Nov. 4, 1873	131	44	4	489
141, 710	Gibson, S., assignor to H. Young, York, Pa. Rotary steam-engine.....	Aug. 12, 1873	275	90	4	165
	Gibson, S. T. (See Abbott & Gibson.)					
138, 632	Gibson, W. G., Lynchburgh, Ohio. Wash-boiler.....	May 6, 1873	146	47	3	509
139, 570	Gidley, R., Moore's Mill, N. Y. Ore-washer.....	June 3, 1873	109	36	3	618
	Giebrich, K., et al. (See Giebrich, L., assignor.)					
140, 496	Giebrich, L., assignor to K. Giebrich and J. Erbacher, Ottumwa, Iowa. Envelope.....	July 1, 1873	130	45	4	19
143, 136	Giebrich, L., Ottumwa, Iowa. Envelope.....	Sept. 23, 1873	714	245	4	333
136, 315	Giffard, P., Paris, France. Air repeating-gun.....	Feb. 25, 1873	853	274	3	232
136, 316	Same..... Compressed air defense-stick.....	Feb. 25, 1873	854	275	3	232
138, 633	Giffard, P., Paris, France, assignor to C. J. A. Dick, Pittsburgh, Pa. Packing for pistons and stop-valves.....	May 6, 1873	146	47	3	509
142, 226	Gifford, E. N., assignor to self, T. B. Stevens, and F. A. Brady, Cleveland, Ohio. Car-coupling.....	Aug. 26, 1873	759	250	4	223
136, 717	Gifford, L. C., Monticello, Ill. Harrow.....	Mar. 11, 1873	331	109	3	281
	Gifford, S. J. (See Skinner & Gifford.)					
144, 757	Gigodot, R., Lyons, France. Blast for furnaces of steam-boilers.....	Nov. 18, 1873	509	173	4	543

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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142, 456	Gilberds, J., and M. Harris, Jamestown, N. Y. Butter-bucket	Sept. 2, 1873	119	38	4	252
135, 904	Gilbert, C., Buffalo, N. Y. Manufacture of starch	Feb. 18, 1873	486	157	3	191
137, 911	Same.....Apparatus for the manufacture of starch	Apr. 15, 1873	578	182	3	428
137, 912	Same.....Starch-mill	Apr. 15, 1873	579	182	3	428
143, 819	Gilbert, E. E., Montreal, Canada. Slide-valve mechanism	Oct. 21, 1873	406	135	4	431
143, 506	Gilbert, E. M., Kasson, Minn. Fanning-mill	Oct. 7, 1873	91	31, 32	4	388
136, 990	Gilbert, H. C., New London, Conn. Knife-cleaner	Mar. 18, 1873	571	191	3	309
144, 451	Gilbert, O. H., Darien, Wis. Sash-fastener	Nov. 11, 1873	243	82	4	510
138, 880	Gilbert, R., and J. P. Topham, Rochester, N. Y. Supplementary heater for steam fire-engines	May 13, 1873	378	118	3	538
145, 498	Gilbert, S., Portsmouth, N. H. Medical compound or liver-lozenge	Dec. 16, 1873	416	.....	4	643
	Gilbert, T. S. (See De Forest & Gilbert)	(Reissue.)				
141, 134	Gilbert, T. S., Birmingham, Conn. Corset	July 22, 1873	728	{ 241 242 }	{ 4 4 }	96
	Gilchrist, I. (See Linthicum, J. F., assignor.)					
	Gildersleeve, C. E. (See Orr & Gildersleeve.)					
136, 831	Gildersleeve, E. B., Wading River, N. Y. Clothes-drier	Mar. 18, 1873	441	146	3	299
	Gildersleeve, J. P., et al. (See Smith, T. S., assignor.)					
145, 939	Giles, F. A., Jersey City, N. J. Watch-barrel	Dec. 30, 1873	838	273	4	700
140, 622	Gilfillan, W., Speier, Minn. Horse-power	July 8, 1873	256	86, 87	4	40
143, 234	Gilfillan, W., Syracuse, N. Y. Combined door hinge and spring	Sept. 30, 1873	800	276	4	356
135, 905	Gill, C. B., Rochester, N. Y. Pump-piston	Feb. 18, 1873	487	158	3	191
6, 378	Gill, G., assignor to Reed & Barton, Taunton, Mass. Card-receiver	Feb. 4, 1873	.....	.....	3	127
6, 379	Same.....Cake-basket	Feb. 4, 1873	.....	.....	3	127
6, 380	Same.....same	Feb. 4, 1873	.....	.....	3	127
6, 799	Same.....Cake-holder	Aug. 12, 1873	.....	.....	4	159
6, 802	Same.....Tea-service	Aug. 12, 1873	.....	.....	4	159
	Gill, J. H. (See Smith & Gill.)					
144, 612	Gill, J. N., Oshkosh, Wis. Carriage-top	Nov. 18, 1873	388	130	4	533
	Gill, R. (See Scott, J., assignor.)					
135, 984	Gillam, J. W. and J. W., jr., Newton, N. J. Car-coupling	Feb. 18, 1873	550	182	3	197
139, 712	Gillespie, C. E., Edwardsville, Ill. Automatic gate	June 10, 1873	256	80	3	645
	Gillespie, J. (See Freeman, J. D., assignor.)					
141, 000	Gillespie, J. E., Norwich, Conn. Rotary pump	July 22, 1873	609	205	4	86
137, 360	Gillespie, J. E., Norwich, and T. Kohn, Hartford, Conn., said Gillespie assignor to said Kohn. Machine for covering cord	Apr. 1, 1873	75	24	3	363
137, 434	Gillespie, J. P., Louisville, Ky. Diamond-pointed drill for dental use	Apr. 1, 1873	139	45	3	368
137, 435	Same.....Machine for cutting grindstones	Apr. 1, 1873	139	46	3	368
141, 344	Gillespie, M., Smith's Ferry, Pa. Reamer for enlarging oil-wells	July 29, 1873	946	307	4	121
	Gillett, G. W. (See Briggs, O. P. and L. W., assignors.)					
	Gillett, W. R. (See Wilson, A. M., assignor.)					
	Gillette, G. W. (See Harris, G. W., assignor.)					
	Same.....(See Prosser & Gillette.)					
144, 528	Gillette, L. D., Meriden, Conn. Fastener for meeting-rails of sashes	Nov. 11, 1873	308	103	4	515
141, 873	Gilliam, A., Pittsburgh, Pa. Coach-pad for harness	Aug. 19, 1873	439	143	4	188
144, 613	Same.....Harness-saddle	Nov. 18, 1873	389	130	4	533
144, 529	Gillott, J., and P. Copley, Barnsley, England. Machine for cutting coal	Nov. 11, 1873	309	104	4	515
	Gilman, C. H., et al. (See Utley, R. G., assignor.)					
	Gilman, E. S. (See Martin, P., assignor.)					
	Gilman, H. (See Curtis, D., assignor.)	(Reissue.)				
	Gilman, H., et al. (See Curtis, D., assignor.)	(Reissue.)				
143, 753	Gilman, S. H., New Orleans, La. Sample-bottle	Oct. 21, 1873	350	117	4	427
143, 754	Same.....Apparatus for refining sugar and sirup	Oct. 21, 1873	350	117	4	427
6, 336	Gilmore, W., assignor to H. J. Dixon & Sons, Kidderminster, England. Carpet (Design)	Jan. 7, 1873	.....	.....	3	7
134, 437	Gilson, L., Boston, Mass. Hand-truck	Jan. 7, 1873	31	10	3	10
139, 310	Gimlich, J., Pittsfield, Mass. Beer-cooler	May 27, 1873	785	250	3	592
	Gingras, L. (See Gingras, T. and L.)					
139, 057	Gingras, T. and L., Buffalo, N. Y. Knife-cleaner	May 20, 1873	536	169	3	564
137, 913	Ginkinger, C. L., Sterling, Ill. Bridle-bit	Apr. 15, 1873	579	182	3	428
136, 150	Gird, E. D., Syracuse, N. Y. Apparatus for cooling and transporting milk	Feb. 25, 1873	715	231	3	221
140, 698	Gish, D. G., assignor of one-half interest to H. B. Garner, Hopkinsville, Ky. Medical compound or liniment	July 8, 1873	317	.....	4	45
	Githens, J. C. (See Nutting & Githens.)					
144, 530	Glad, G. H., Boston Highlands, Mass. Caster for furniture	Nov. 11, 1873	309	104	4	515
136, 151	Gladding, F. H., Providence, R. I. Buckle-fastening	Feb. 25, 1873	716	231	3	221
	Gladding, T. S. (See Haight & Gladding.)					
138, 881	Gladney, R., Buena Vista, Miss., assignor to E. H. Hotchkiss, New York, N. Y. Sewing-machine brake	May 13, 1873	379	118	3	538
137, 543	Glantz, C., Baltimore, Md. Crimper for boots and shoes	Apr. 8, 1873	247	76	3	388
145, 940	Same.....Machinery for crimping the uppers of boots and shoes	Dec. 30, 1873	639	273	4	700
144, 087	Glanville, C., San Francisco, Cal. Method of laying off shoe-uppers	Oct. 28, 1873	659	217	4	462
144, 531	Glanville, W. W., Crawford County, Iowa. Wash-boiler attachment	Nov. 11, 1873	310	104	4	515
5, 600	Glascock, F. R., Hillsborough, Ohio. Pitman	Oct. 14, 1873	324	107	4	414
	Glasgow, R. W. (See McCreight & Glasgow.)					
5, 265	Glass, H., Honeoye Falls, N. Y., assignor by mesne assignment to Bailey Washing and Wringing Machine Company. Wringing-machine	Feb. 4, 1873	215	67	3	144
141, 641	Glass, J., assignor to Wilson, Glass & Co., Pittsburgh, Pa. Rolls for rolling wagon-hub bands	Aug. 12, 1873	217	69	4	161
	Glasure, A. J., et al. (See Thomas, O. F., assignor.)					
	Gleason, C. J. (See Pitkin & Gleason.)					
140, 191	Gleason, E. P., Brooklyn, N. Y. Gas-lighting torch	June 24, 1873	704	222	3	697
142, 334	Gleason, J., Brooklyn, N. Y. Shield for sad-irons	Sept. 2, 1873	11	4	4	243
138, 799	Gleason, J. H., Troy, N. Y. Carriage-curtain fastening	May 13, 1873	306	95	3	533
143, 898	Gleason, W., assignor of one-half interest to Kidd Iron Works Company, Rochester, N. Y. Screw-cutting attachment for lathes	Oct. 21, 1873	472	159	4	437
141, 218	Glen, W., Toronto, Canada. Balanced valve for steam-engines	July 29, 1873	824	269	4	111
143, 569	Glendinning, D. W., Detroit, Mich. Brick-machine	Oct. 14, 1873	161	54	4	402
141, 135	Glenn, G. K., assignor of one-half interest to J. L. and M. Robinson, Ashton, Ill. Feathering paddle-wheels	July 22, 1873	729	242	4	96
	Glidden, C. W. (See Ellis & Glidden)	(Reissue.)				
134, 538	Glidden, C. W., Lynn, Mass. Manufacture of boot and shoe heels	Jan. 7, 1873	33	11	3	10
135, 111	Same.....Lasting-machine	Jan. 21, 1873	565	184	3	81
135, 329	Same.....Machines for separating and delivering tacks	Jan. 28, 1873	780	{ 252 253 }	{ 3 3 }	110
135, 538	Same.....Machine for shaping the edges of boot and shoe heels	Feb. 4, 1873	135	42	3	138

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 539	Glidden, C. W., Lynn, Mass. Lasting-machine for boots and shoes	Feb. 4, 1873	136	42, 43	3	138
135, 540	Same..... Machine for lasting boots and shoes	Feb. 4, 1873	137	43, 44	3	138
135, 797	Glidden, C. W., Lynn, Mass., assignor to J. W. Brooks, trustee, Boston, Mass. Nail-cutting machine	Feb. 11, 1873	380	123	3	169
136, 233	Glidden, C. W., Lynn, Mass. Boot and shoe heeling machine	Feb. 25, 1873	777	251	3	226
136, 317	Same..... Machine for lasting boots and shoes	Feb. 25, 1873	854	275	3	232
136, 318	Same..... Lasting-tool	Feb. 25, 1873	855	275	3	232
136, 503	Glidden, C. W., Lynn, assignor to J. W. Brooks, trustee, Boston, Mass. Machine for pricking and nail-loading boot and shoe heels	Mar. 4, 1873	131	42, 43	3	256
138, 634	Same..... Machine for forming boot-heels	May 6, 1873	147	47	3	509
139, 382	Same..... Machine for manufacturing boot and shoe heel blanks	May 27, 1873	840	269	3	597
140, 265	Glidding, C. W., Lynn, Mass. Lasting-machine	June 24, 1873	763	241	3	702
143, 507	Glidding, C. W., Lynn, Mass., assignor to J. W. Brooks, trustee, Boston, Mass. Heel-burnishing machine	Oct. 7, 1873	92	32	4	388
143, 690	Same..... same	Oct. 14, 1873	270	89	4	411
143, 899	Same..... Machine for burnishing the heels of boots and shoes	Oct. 21, 1873	473	159	4	437
139, 058	Glidden, C. W., Lynn, H. P. Fairfield, assignors to J. W. Brooks, trustee, Boston, Mass. Heeling-machine	May 20, 1873	537	{ 169 170 }	{ 3 3 }	564
137, 545	Glidden, O. F., assignor of one-half interest to B. A. Fowler, Stoneham, Mass. Wash-boiler	Apr. 8, 1873	250	76	3	389
141, 044	Glidden, R. W. (See Marble & Glidden.) Glines, J., Postville, Iowa. Washing-machine	July 22, 1873	647	218	4	89
	Globe Nail Company. (See Turbayne & Wyman, assignors.) Same..... (See Turbayne, D., assignor.)					
143, 820	Glover, J. H., Freedom, Ky. Wheel for vehicles	Oct. 21, 1873	407	136	4	431
145, 861	Glue, W., Muskegon, Mich. Refuse-burner	Dec. 23, 1873	744	243	4	682
135, 798	Gminder, W., Reutlingen, Germany. Shedding mechanism	Feb. 11, 1873	381	123	3	169
142, 388	Goble, G. S., Saint Louis, Mo. Hose-coupling	Sept. 2, 1873	62	20	4	247
139, 789	Godard, A. D., Chicago, Ill. Stucco ornaments	June 10, 1873	323	100	3	650
135, 985	Goddard, C. F., Saint Ansgar, Iowa. Grain-binding harvester	Feb. 18, 1873	551	182	3	197
142, 389	Same..... Harvester-reel	Sept. 2, 1873	62	21	4	247
144, 024	Goddard, E., Saint Louis, Mo. Steam-generator	Oct. 28, 1873	605	200	4	458
145, 293	Same..... same	Dec. 9, 1873	234	79	4	616
136, 055	Goddu, L., Boston, Mass. Armor-clad vessel	Feb. 18, 1873	611	201	3	201
143, 137	Goddu, L., assignor to the American Cable-Screw Wire Company, Boston, Mass. Spool for boot and shoe soling machines	Sept. 28, 1873	714	245	4	333
	Godfrey, L. (See Andrews & Godfrey.) Godfrey, W. L. (See Popping, J., assignor.) Godfroy, W. A. T., et al. (See McPherson, W. H., assignor.)					
137, 300	Godley, G. F., New York, N. Y. Car-spring	Apr. 1, 1873	19	6	3	358
140, 192	Same..... Railway-car spring	June 24, 1873	705	222	3	697
140, 033	Godwin, J. B., Washington, N. C. Press	June 17, 1873	542	172	3	676
144, 899	Goebel, J., and J. Preis, Caledonia, Wis. Leather-splitting machine	Nov. 25, 1873	636	216	4	564
144, 025	Goetze, F., and D. Müller, New York, N. Y. Accordion, &c.	Oct. 28, 1873	606	201	4	458
6, 480	Goetze, H. F., assignor to The Roxbury Carpet Company, Boston, Mass. Carpet. (Design)	Mar. 4, 1873			3	245
6, 481	Same..... Carpet	Mar. 4, 1873			3	245
6, 758	Same..... same	July 8, 1873			4	36
6, 950	Same..... same	Oct. 7, 1873			4	380
141, 554	Goewey, G., Philadelphia, Pa. Apparatus for treating and aging spirituous liquors	Aug. 5, 1873	125	39	4	145
137, 436	Goff, J. W., Providence, R. I. Iron-tender and car-frame	Apr. 1, 1873	140	46	3	368
137, 544	Goffrie, C. F. L., and J. H. Schucht, London, England. Piano and organ keys	Apr. 8, 1873	249	76	3	329
145, 168	Goge, S., New York, N. Y. Ear-muff	Dec. 2, 1873	120	39	4	595
5, 553	Going, A. J., Clinton, La. Cotton-bale tie	Aug. 22, 1873	843	278	4	230
137, 301	Same..... same	Apr. 1, 1873	20	6	3	359
	Gold and Stock Telegraph Company. (See Edison, T. A., assignor.) Same..... same					
	Same..... (See Pope & Edison, assignors)					
137, 546	Gold, S. F., Englewood, N. J. Apparatus for heating buildings by steam. (Extension)	June 21, 1873			3	662
139, 571	Same..... Hot-air furnace	Apr. 8, 1873	250	77	3	389
144, 088	Golden, W. N., Coldwater, Mich. Butter-worker	June 3, 1873	109	37	3	618
145, 101	Golding, W., New Orleans, La. Steam-generator	Oct. 28, 1873	659	217	4	462
138, 144	Golding, W. H., Chelsea, Mass. Printing-press	Dec. 2, 1873	58	18, 19	4	590
143, 900	Goldman, I. S., Winterset, Iowa. Automatic cradle	Apr. 22, 1873	794	253	3	455
141, 503	Same..... Tobacco-knife	Oct. 21, 1873	474	159	4	437
144, 843	Goldmann, H., New York, N. Y. Treating cotton-seed oil to render it drying	Aug. 5, 1873	84		4	142
143, 343	Goldsmith, G., and J. Dilkes, Leicester, England. Apparatus for removing obstructions from gas-pipes	Nov. 25, 1873	594	202	4	560
145, 169	Goldsmith, J. M., Boston, Mass. Cotton-bale tie	Sept. 30, 1873	901	306	4	364
140, 911	Goldthorp, D., and T. Hield, assignors of one-half interest to J. B. Clapp, Hartford, Conn. Brick-machine	Dec. 2, 1873	120	39, 40	4	595
136, 649	Goldthorp, S. H., assignor to R. H. Smith, Pittsburgh, Pa. Apparatus for making gas from oils	July 15, 1873	509	171	4	69
143, 138	Goldthwait, C., South Weymouth, Mass. Shoe-fastening	Mar. 11, 1873	277	93	3	276
144, 090	Goldthwait, J. F., Boston, Mass. Gas-bracket	Sept. 23, 1873	715	245	4	333
140, 820	Golletz, J. (See Phillips & Golletz.) Gonberg, O. H., Ferrysburgh, Mich. Balanced slide-valve	Oct. 28, 1873	661	218	4	462
140, 821	Gonellaz, H., Vermillionville, La. Ditching-machine	July 15, 1873	428	145	4	62
143, 508	Same..... Dredging-machine	July 15, 1873	429	146	4	62
143, 977	Good, J., Williamsburgh, N. Y. Condensing-tube for spinning-machines, &c.	Oct. 7, 1873	93	33	4	388
	Good, J., Lancaster, Pa. Kitchen and ironing table	Oct. 28, 1873	562	187	4	454
	Goodale, W., Clinton, Mass. Machine for making paper bags	July 12, 1873			4	35
	Same..... same	Aug. 23, 1873			4	185
136, 152	Goodchild, W. H., Bayonne, N. J., and S. F. Hay, Brooklyn, N. Y., assignors to said Goodchild. Joiner's clamp	Feb. 25, 1873	717	232	3	221
139, 667	Goodell, A. D., assignor to Miller's Falls Company, Miller's Falls, Mass. Bit-stock	June 10, 1873	209	68	3	642
141, 345	Same..... same	July 29, 1873	946	308	4	121
	Goodell, A. T. (See Loomis & Goodell)					
	Goodell, A. W. (See Johnson & Goodell)					
6, 698	Goodell, B. A., Waltham, Mass. Watch-hands	June 3, 1873			3	608
142, 097	Goodell, Braun & Co. (See Braun, J., assignor.) Goodenough, C., New York, N. Y. Horseshoe	Aug. 26, 1873	652	214	4	215
136, 718	Goodes, E. A., Philadelphia, Pa. Sewing-machine	Mar. 11, 1873	332	{ 110 111 }	{ 3 3 }	281

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142, 013	Goodes, E. A., Philadelphia, Pa. Sewing-machine.....	Aug. 19, 1873	552	{ 182 183	{ 4	197
140, 034	Goodfellow, J. T., and F. A. Sabbaton, Troy, N. Y. Gas-purifier.....	June 17, 1873	543	{ 172 173	{ 3	676
139, 782	Goodhart, A., Newville, Pa. Separator for iron and other ores.....	June 10, 1873	324	100	3	650
135, 112	Gooding, W. M. (See Walker & Gooding.)					
135, 113	Goodman, S., Natick, Mass. Hat-stretching machine.....	Jan. 21, 1873	566	184	3	81
135, 113	Goodman, S. A., jr., Jamestown, Tex. Compound for fish-baits.....	Jan. 21, 1873	567	.....	3	81
138, 882	Goodrich, A. S., assignor to self, A. Pollock, and G. Van Wagenen, New York, N. Y. Water-gauge and feed-indicator for steam-boilers.....	May 13, 1873	380	119	3	539
144, 532	Goodrich, B., Stratham, N. Y. Road-trimmer.....	Nov. 11, 1873	311	105	4	515
	Goodrich, H. C. (See Barnum & Goodrich.)					
	Same..... (See Barnum, R. S., assignor.)					
134, 744	Goodrich, H. C., Chicago, Ill. Ruffling-attachment for sewing-machines.....	Jan. 14, 1873	237	76	3	40
138, 635	Same..... Tuck-marker for sewing-machines.....	May 6, 1873	148	48	3	510
138, 636	Same..... same.....	May 6, 1873	149	48	3	510
138, 637	Same..... Presser-foot for sewing-machines.....	May 6, 1873	150	48	3	510
138, 638	Goodrich, H. C., and R. Barnum, Chicago, Ill. Hemmer for sewing-machines.....	May 6, 1873	150	48	3	510
136, 650	Goodrich, W. R., Utica, N. Y. Wrought-iron blind-hinge.....	Mar. 11, 1873	278	93	3	277
143, 621	Goodridge, J. M., Norfolk, Va. Tag-fastener.....	Oct. 14, 1873	208	70	4	406
139, 383	Goodsell, L. A., assignor to self and A. J. Ramsdell, New Haven, Conn. Plasterer's float.....	May 27, 1873	841	269	3	597
137, 674	Goodsell, S. C., Westville, Conn. Lathe-chuck.....	Apr. 8, 1873	361	112	3	398
	Goodson, J. E. (See Skinner & Goodson.)					
141, 642	Goodwin, A. J., Brookline, Mass. Machinery for goring shoe-uppers.....	Aug. 12, 1873	218	69	4	161
143, 235	Goodwin, J. E., Brewerton, N. Y. Cam-movement.....	Sept. 30, 1873	801	276	4	356
142, 785	Goodwin, J. M., New York, N. Y. Bridge.....	Sept. 16, 1873	423	143	4	298
135, 906	Goodwin, S. A., assignor to W. D. Taber, Buffalo, N. Y. Condenser for steam-engines.....	Feb. 18, 1873	488	158	3	192
138, 016	Goodwin, W. W., Camden, N. J. Gas-light and pressure indicator.....	Apr. 22, 1873	683	216	3	446
	Goodyear, G. (See Sprague, W. N., assignor.)					
136, 991	Goodyear, G., New York, N. Y. Boot and shoe shank.....	Mar. 18, 1873	572	191	3	310
140, 771	Goodyear, J., Groton, N. Y. Fountain pen.....	July 15, 1873	382	131	4	59
141, 434	Goodyear, J., Yonkers, N. Y. Machine for winding bobbins.....	Aug. 5, 1873	21	6, 7	4	136
141, 435	Goodyear, L., Trumansburgh, N. Y. Door check.....	Aug. 5, 1873	23	7	4	137
	Goodyear, L. F., New Haven, Conn. Tool for cutting metal..... (Extension)	Mar. 29, 1873	.....	.....	.....	.....
140, 266	Goodyear, M. W., New York, N. Y. Telegraph-sounder.....	June 24, 1873	764	241	3	702
139, 384	Goodyear, R. B., Wilmington, Del., assignor of one-half interest to B. H. Jenks, Philadelphia, Pa. Shuttle-box mechanism for looms.....	May 27, 1873	842	269	3	597
144, 089	Goodyear, R. B., Wilmington, Del., assignor to self and J. Greenhalgh, Philadelphia, Pa. Shuttle-box operating mechanism.....	Oct. 28, 1873	660	217	4	462
	Goodyear Rubber-Head Pencil Company. (See Gray, J., assignor.)					
138, 748	Goolaven, M., Taunton, Mass. Car-coupling.....	May 13, 1873	261	81	3	529
6, 410	Goold, J. C., Albany, N. Y. Landau-sleigh..... (Design)	Feb. 11, 1873	.....	.....	3	157
138, 145	Gordon, C., London, England. Gun-lock.....	Apr. 22, 1873	795	{ 253 254	{ 3	455
138, 146	Same..... Breech-loading ordnance.....	Apr. 22, 1873	795	254	3	455
142, 457	Gordon, G. P., Rahway, N. J. Inking-apparatus.....	Sept. 2, 1873	120	38	4	252
141, 045	Gordon, J., San Francisco, Cal. Spring-joint for watch-cases.....	July 22, 1873	647	218	4	89
140, 822	Gordon, J. F., Rochester, N. Y. Grain-binder.....	July 15, 1873	430	146	4	62
139, 243	Gordon, R. H., sr., Cleveland, Ohio. Railway freight-car.....	May 27, 1873	725	{ 228 229	{ 3	587
135, 541	Gordon, W., assignor of two-thirds interest to A. McCambridge, and T. Kennedy, Philadelphia, Pa. Composition basin-faucets.....	Feb. 4, 1873	138	44	3	138
145, 412	Gordon, W. J., Philadelphia, Pa. Machine for cutting out and stamping up sheet-metal boxes.....	Dec. 9, 1873	335	112	4	625
142, 098	Gore, H. A., Goshen, Ind. Wheel for vehicles.....	Aug. 26, 1873	652	214	4	215
	Gore, J., Brattleborough, Vt. Harvester..... (Extension)	Dec. 27, 1873	.....	.....	4	670
26, 582	Same..... same..... (Disclaimer filed)	Dec. 15, 1873	.....	.....	4	671
	Gorham Manufacturing Company. (See Beek, C., assignor.)					
	Same..... (See Shaw, T., assignor.)					
	Same..... (See Wilkinson, G., assignor)..... (Design.)					
142, 099	Gorham, W. B., Boston, Mass. Hand-stamp.....	Aug. 26, 1873	653	215	4	215
134, 745	Gorman, J. J., Cincinnati, Ohio. Paint-brush.....	Jan. 14, 1873	238	77	3	40
139, 887	Same..... same.....	June 17, 1873	424	132	3	666
137, 068	Gorman, T. G., and N. W. Perego, Springfield, Ill. Apparatus for brazing metal tubes.....	Mar. 25, 1873	654	217	3	328
6, 807	Gorman, W., assignor to The Russell and Erwin Manufacturing Company, New Britain, Conn. Lock-escutcheon plate..... (Design)	Sept. 2, 1873	.....	.....	4	241
7, 018	Same..... Butt-hinge..... (Design)	Dec. 9, 1873	.....	.....	4	614
7, 019	Same..... Door-knob rose..... (Design)	Dec. 9, 1873	.....	.....	4	614
7, 020	Same..... Door-knob..... (Design)	Dec. 9, 1873	.....	.....	4	614
7, 021	Same..... Key-hole escutcheon..... (Design)	Dec. 9, 1873	.....	.....	4	614
7, 068	Same..... Knob-rose and escutcheon..... (Design)	Dec. 23, 1873	.....	.....	4	671
	Gorman, W. A. (See Siebe, Gorman & Christy.)					
145, 413	Gormann, C., and J. B. Thiel, Union Hill, N. J. Vehicle.....	Dec. 9, 1873	336	113	4	625
138, 147	Gorrel, T., Warren, assignor of one-half interest to G. J. Hampson, Providence, R. I. Sizing-compound.....	Apr. 22, 1873	796	.....	3	455
142, 335	Gorris, F., Cleveland, Ohio. Lock.....	Sept. 2, 1873	12	4	4	243
138, 392	Gortner, H., Nashport, Ohio. Hand corn-planter.....	Apr. 29, 1873	1,042	328	3	483
136, 234	Gorton, J., New York, N. Y. Chimney-top.....	Feb. 25, 1873	778	251	3	226
	Gory, E. G. (See Pearson, S., assignor)..... (Reissue)					
138, 148	Gory, E. G., assignor to self and H. T. Niemann, Cincinnati, Ohio. Lock for drawers, &c.....	Apr. 22, 1873	797	254	3	455
5, 644	Gosling, J. W., Cincinnati, Ohio. Step-cover and wheel-fender for carriages. (Reissue).....	Nov. 4, 1873	179	60	4	493
135, 330	Goss, C. N., Claremont, N. H. Horse hay-rake.....	Jan. 28, 1873	781	253	3	110
137, 069	Goss, G. D., Boston, Mass. Reclining-chair.....	Mar. 25, 1873	656	{ 217 218	{ 3	328
143, 821	Gosshorn, W., Waterloo, Pa. Flour-bolt.....	Oct. 21, 1873	408	136	4	431
137, 196	Gotham, M., Oil City, Pa. Self-tamping torpedo.....	Mar. 25, 1873	771	254	3	336
	Gotia, B. (See Auguste, B., assignor.)					
140, 772	Gottlieb, A., Chicago, Ill. Iron-roof truss.....	July 15, 1873	383	132	4	59
142, 563	Same..... Fire-proof shutter.....	Sept. 9, 1873	226	73	4	272
139, 504	Gouch, L. A., Yonkers, N. Y. Lamp-post.....	June 3, 1873	53	17	3	613
135, 035	Goudreau, L., Kankakee, Ill. Rain-water switch and reversible valve for cisterns, &c.....	Jan. 21, 1873	507	164	3	76
143, 139	Gould, C. G., Windham, Vt. Gun-cleaner.....	Sept. 23, 1873	715	246	4	333
137, 547	Gould, C. H., Boston, Mass. Carriage-step.....	Apr. 8, 1873	252	77	3	389
141, 219	Gould, E. T., Mont Clair, N. J. Flue for buildings.....	July 29, 1873	825	270	4	111
	Gould, F., et al. (See Fischer, W. E., assignor)..... (Reissue.)					

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138, 639	Gould, H., Minneapolis, Minn. Belt-lacing gage	May 6, 1873	151	49	3	510
139, 572	Gould, J., Clinton, Pa. Animal-trap	June 3, 1873	110	37	3	618
142, 159	Gould, J. H., assignor of two-thirds interest to H. Holt, Rutland, Ohio. Hoe	Aug. 26, 1873	703	232	4	219
138, 244	Gould, L., Norwich, Conn. Planing-machine	Apr. 29, 1873	909	287	3	473
144, 199	Same.....same	Nov. 4, 1873	24	7	4	480
135, 271	Gould, M. B., assignor to self and S. D. Oakes, Buffalo, N. Y. Flower-pot	Jan. 28, 1873	729	233	3	106
142, 458	Gould, R. J., Newark, N. J. Valve-guide	Sept. 2, 1873	121	39	4	252
144, 844	Gould, R. J., and M. E. Campfield, assignors to R. J. Gould, Newark, N. J. Valve for pumps	Nov. 25, 1873	594	202	4	560
144, 758	Gould, W. B., Montrose, N. J. Stair-rod fastener	Nov. 18, 1873	510	173	4	543
144, 759	Same.....same	Nov. 18, 1873	511	173	4	543
141, 643	Gould, W. H., Manchester, N. H. Dish-drainer	Aug. 12, 1873	220	69	4	161
136, 504	Goulding, J., Worcester, Mass. Lubricating spindle	Mar. 4, 1873	132	43	3	256
136, 719	Same.....Traveler for spinning-rings	Mar. 11, 1873	335	111	3	281
134, 660	Gove, A. J., San Francisco, Cal. Track-clearer	Jan. 7, 1873	154	51	3	19
137, 437	Gove, R., Laconia, N. H. Mainspring safety-attachment for watches	Apr. 1, 1873	142	46	3	368
134, 795	Gowdy, J., et al. (See Rider, A. K., assignor.)	Jan. 14, 1873	280	91	3	43
137, 070	Gowenlock, W., Susquehanna Depot, Pa. Steam-lubricator	Mar. 25, 1873	657	218	3	328
135, 424	Gowing, O., Boston, Mass. Shirt	Feb. 4, 1873	29	8	3	130
134, 796	Grabner, J., Warsaw, Ind. Flue-blast for steam fire-engine	Jan. 14, 1873	281	91	3	43
134, 797	Grady, P., assignor to J. Cochrane, New York, N. Y. Paper-sizing	Jan. 14, 1873	282	.....	3	43
145, 645	Graf, L., Newark, N. J. Machine for heeling boots and gaiters	Dec. 16, 1873	550	181	4	654
144, 332	Graham, D. M., Evansville, Ind. Railway-chair	Nov. 4, 1873	132	44	4	489
139, 001	Graham, E. M., Vernon, La. Cultivator	May 20, 1873	488	154	3	561
136, 720	Graham, J. (See Carlock, W. B., assignor.)	Mar. 11, 1873	335	111	3	281
138, 494	Graham, J. C., et al. (See McClure, W. B., assignor.)	May 6, 1873	22	8	3	499
145, 862	Graham, J. F., assignor of one-half interest to A. Bettes, Warrensburgh, Mo. Sash-holder	Dec. 23, 1873	745	243	4	682
143, 978	Graham, J. L., Carthage, Ill. Plow	Oct. 28, 1873	563	187	4	454
145, 294	Graham, J. R. (See Williams, W. H., assignor.)	Dec. 9, 1873	234	79	4	617
138, 495	Graham, O. B. (See Pike & Graham.)	May 6, 1873	23	8	3	499
143, 978	Graham, R. (See Barsalouse & Graham.)	Oct. 28, 1873	563	187	4	454
145, 294	Graham, W. H., Saint Louis, Mo. Stop-cock boxing	Dec. 9, 1873	234	79	4	617
138, 495	Gramm, C. R., Bainbridge, Pa. Washing implement	May 6, 1873	23	8	3	499
137, 607	Grandy, C. E. (See Grandy, Z. B. & C. E.)	Apr. 8, 1873	303	94	3	393
142, 390	Grandy, C. E., assignor to self, Z. B. Grandy, and W. D. Heald, Stafford Springs, Conn. Saw-set	Sept. 2, 1873	63	21	4	247
137, 361	Grandy, C. E., Stafford Springs, Conn. Saw-tooth gage	Apr. 1, 1873	76	25	3	363
141, 046	Grandy, C. E. and Z. B., assignors to selves and W. D. Heald, Stafford Springs, Conn. Oiler	July 22, 1873	648	218	4	89
143, 140	Grandy, Z. B., et al. (See Grandy, C. E., assignor.)	Sept. 23, 1873	716	246	4	333
141, 001	Grandy, Z. B. (See Grandy, C. E. and Z. B.)	July 22, 1873	610	205	4	86
138, 245	Grandy, Z. B. and C. E., assignors to selves and W. D. Heald, Stafford Springs, Conn. Kerosene-heater	Apr. 29, 1873	910	287	3	473
130, 133	Granite Roofing Company. (See Morgan, P. H., assignor.)	June 24, 1873	655	205	3	693
136, 153	Grannis, C. M., and L. M. Fitch, Morrisville, N. Y. Rein-holder	Feb. 25, 1873	718	232	3	221
142, 227	Grant, A. J., Williamstown, N. Y. Fastening for bureau drawers	Aug. 26, 1873	759	250	4	223
142, 564	Grant, E. B. (See Frederici, C., assignor.)	Sept. 9, 1873	226	74	4	272
139, 311	Grant, G. B., Cambridge, Mass. Calculating-machine	May 27, 1873	786	250	3	592
136, 235	Grant, J. B. (See McCarthy, E. P., assignor.) (Reissue.)	Feb. 25, 1873	779	252	3	226
139, 888	Grant, J. J., Greenfield, Mass. Die for cutting screw-threads	June 17, 1873	425	132	3	666
142, 459	Same.....Die-stock for cutting screws	Sept. 2, 1873	122	39	4	252
5, 396	Same.....Friction-clutch	May 6, 1873	239	75	3	517
137, 438	Grant, J. J., assignor to self, S. L. Wiley, and C. P. Russell, Greenfield, Mass. Friction-clutch	Apr. 1, 1873	142	46	3	368
144, 533	Grant, J. W., and C. H. Cook, Providence, R. I. Bracelet	Nov. 11, 1873	311	105	4	515
139, 573	Grant, R. C., Middleport, Ohio. Mechanism for feed nail-plates	June 3, 1873	111	.....	3	618
140, 193	Grant, S. W., assignor to A. O. Baker, Providence, R. I. Bracelet	June 24, 1873	706	222	3	697
145, 732	Grantham, J., London, England. Steam-carriage for tramways	Dec. 23, 1873	637	208	4	673
143, 822	Graser, E., Union City, Pa. Pump	Oct. 21, 1873	408	136	4	431
135, 799	Grassler, W. F., Muncy, Pa. Spark-arrester	Feb. 11, 1873	383	123	3	169
140, 361	Gratz, H. H., Lexington, Ky. Lawn-seat	July 1, 1873	23	8	4	10
141, 268	Graupner, F. G., Evansville, Ind. Dyeing fabrics	July 29, 1873	873	286	4	115
138, 393	Graves, A., Roscoe, Ill. Clothes-drier	Apr. 29, 1873	1,042	328	3	483
138, 394	Graves, C., G. C. Powers, and C. O. Graves, Waterbury, Vt. Milk-cooler	Apr. 29, 1873	1,043	328	3	483
142, 014	Graves, C. O. (See Graves, Powers & Graves.)	Aug. 19, 1873	554	183	4	197
136, 319	Graves, H. P. (See Wolcott, G. T., assignor.)	May 17, 1873	.....	.....	3	527
144, 534	Graves, J. E., et al. (See Reed, G. D., assignor.)	Feb. 25, 1873	856	275	3	232
135, 272	Graves, M. F., Sunbury, Pa. Ice-cream freezer	Nov. 11, 1873	312	105	4	515
139, 002	Graves, R. C., Barnesville, Ohio. Furnace grate-bar	Jan. 28, 1873	730	234	3	106
140, 362	Graves, T. B., Cortlandville, N. Y. Stirrer for maple-sugar	May 20, 1873	490	155	3	561
134, 596	Gray, A. W., assignor to L. A. Y., & A. W. Gray, Middletown, Vt. Link of endless-chains for horse-power	July 1, 1873	23	8	4	10
134, 597	Gray, A. Y., et al. (See Gray, A. W., assignor.)	Jan. 7, 1873	91	29	3	14
145, 414	Gray, G. A., jr., Hamilton, Ohio. Hydraulic-wheel press	Jan. 7, 1873	93	30	3	14
145, 941	Same.....Machine for turning pulleys	Dec. 9, 1873	337	113	4	625
142, 460	Gray, H., assignor to National Water-wheel Company, Bristol, Conn. Centering-device for lathes	Dec. 30, 1873	840	273	4	700
	Gray, J., Medford, Mass. Sewing-machine	Sept. 2, 1873	123	40	4	252
	Gray, J., Medford, Mass., assignor by mesne assignment to Goodyear Rubber-Head Pencil Company, New York, N. Y. Lead-pencil					
	Gray, J., Raymond, Miss. Fence					
	Gray, J. J., Boston, Mass. Card-rack					
	Gray, J. W., Harrisburgh, Pa. Spark-arrester and extinguisher for locomotives					
	Gray, L., et al. (See Gray, A. W., assignor.)					
	Gray, L. N. B., assignor of one-half interest to E. B. Paul, Boston, Mass., and D. A. Reed, New York, N. Y. Sewing-machine table and chair combined					
	Gray, S. S., Boston, Mass. Machine for joining staves					
	Same.....Machine for crozing and chamfering staves					
	Same.....Shirt					
	Same.....Collar and tag cutting machine					
	Gray, W. H., assignor to S. A. Woods, Boston, Mass. Planing-machine					

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No.	Name, residence and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 415	Greacen, J., jr., New York, N. Y. Flexible play-pipe for hose.....	Dec. 9, 1873	338	113	4	625
140, 912	Greacen, S., Rye, N. Y. Eye-glass.....	July 15, 1873	510	172	4	69
	Great American Malt and Grain Drying Company. (See Morgan, W. F., assignor.)					
139, 783	Grebner, M., New York, N. Y. Toy.....	June 10, 1873	324	101	3	651
139, 784	Same..... Wire cage.....	June 10, 1873	325	101	3	651
138, 017	Greely, B. J., Boston, Mass. Drawers.....	Apr. 22, 1873	684	216	3	446
141, 926	Same..... Suspenders.....	Aug. 19, 1873	481	158	4	191
	Green, A. M., et al. (See Green, C., assignor.)					
140, 363	Green, B. F., Syracuse, N. Y. Chair and step-ladder combined.....	July 1, 1873	24	8	4	10
	Green, C. (See Wilson, Green & Wilson)..... (Extension.)					
135, 542	Green, C., assignor to self, S. D. McNeal, and A. M. Green, Osseo, Mich. Cheese-skipper extractor.....	Feb. 4, 1873	139	44	3	138
140, 913	Green, C., and W. Wilson, jr., Wilmington, Del. Powder-keg.....	July 15, 1873	510	172	4	69
142, 461	Green, C. E., and J. H. Bodwell, Newark, N. J. Ferrule.....	Sept. 2, 1873	124	40	4	252
142, 691	Green, C. W., Pontiac, Mich. Manufacture of shoes.....	Sept. 9, 1873	330	110	4	280
142, 692	Same..... Same.....	Sept. 9, 1873	330	111	4	280
137, 302	Green, D., Renock, Ohio. Vise.....	Apr. 1, 1873	21	6	3	359
136, 236	Green, F. D., Williamsport, Pa. Dovetailing-machine.....	Feb. 25, 1873	780	252	3	226
136, 505	Same..... Machine for relishing doors, &c.....	Mar. 4, 1873	133	43	3	256
140, 267	Same..... Mitering-machine.....	June 24, 1873	765	242	3	702
142, 015	Same..... Machine for raising panels.....	Aug. 19, 1873	555	{ 183 184 }	{ 4 4 }	197
135, 543	Green, H. S., Sherbrooke, Canada, assignor of one-half interest to C. H. Weston, Lowell, Mass. Cloth-steaming machine.....		140	44	3	138
139, 059	Green, I. B., Gillespie, Ill. Wheel-plow.....	May 30, 1873	540	170	3	565
143, 623	Green, J., Brooklyn, assignor to self and J. Bach, New York, N. Y. Edge-protecting welt for boots and shoes.....	Oct. 14, 1873	209	70	4	406
	Green, J. B. (See Hess, J. W., assignor.)					
137, 836	Green, J. C., Flanders, N. J. Turbine water-wheel.....	Apr. 15, 1873	516	161	3	423
140, 699	Green, J. E., Saint Louis, Mo. Stave-jointer.....	July 8, 1873	318	108	4	45
140, 823	Green, J. F. and S. H., Haverstraw, N. Y. Grindstone.....	July 15, 1873	431	146	4	63
	Green, S. (See Holton, M. G., assignor.)					
	Green, S. H. (See Green, J. F. and S. H.)					
141, 785	Green, T., New York, N. Y. Apparatus for navigating the air.....	Aug. 12, 1873	344	{ 113 114 }	{ 4 4 }	171
143, 622	Green, W., New Orleans, La. Process of preserving the stubble of sugar-cane from decay.....	Oct. 14, 1873	209		4	406
139, 951	Green, W. V., and J. M. Kintzel, Wellsville, Ohio. Medical compound or catarrh remedy. Greene, A. M. (See Platt, W. K., assignor.)	June 17, 1873	475		3	670
136, 154	Greene, C. W., Jackson, Tenn. Labeling-machine.....	Feb. 25, 1873	719	232	3	221
	Greene, E. A. (See Foster, J. W., assignor.)					
137, 071	Greene, G. S., jr., Mott Haven, N. Y. Cartridge capping and uncapping device.....	Mar. 25, 1873	657	218	3	328
	Greene, H. R. (See Hardy, D. D., assignor.)					
	Greene, J. F., Brooklyn, N. Y. Machinery for disintegrating waste felt fabrics. (Extension).. Same..... Obtaining fibers from waste felted fabrics..... (Extension).. Greene, J. S., and T. D. Bradt, Watertown, N. Y. Carpet-stretcher.....	Apr. 12, 1873 Apr. 11, 1873 May 6, 1873	 84	 27	3 3 3	386 386 504
138, 560	Greene, J. W., Chillicothe, Mo. Animal-trap.....	Jan. 7, 1873	34	11	3	10
134, 539	Greene, S. (See Thompson & Greene, assignors.)					
135, 273	Greene, W. A., Medford, Mass. Cooking-stove.....	Jan. 28, 1873	730	234	3	106
	Greene, W. H. (See Thompson & Greene.)					
144, 900	Greene, W. R., Juda, Wis. Spoke-setting machine.....	Nov. 25, 1873	637	217	4	564
	Greenhalgh, J. (See Goodyear, R. B., assignor.)					
145, 564	Greenleaf, A., Brooklyn, N. Y. Culinary tongs.....	Dec. 16, 1873	482	157	4	648
141, 927	Greenleaf, C. H., Franconia, N. H. Annunciator.....	Aug. 19, 1873	481	159	4	191
	Greenleaf, O. S. (See Lawler, M., assignor.)					
143, 236	Greenlee, R. L., Chicago, Ill. Sash and door clamp.....	Sept. 30, 1873	802	276	4	356
5, 589	Greenough, J. J., Syracuse, N. Y. Apparatus for grooming horses..... (Reissue).. Same..... Gear-cutting machine.....	Oct. 7, 1873 Jan. 28, 1873	144 680	48 219	4 3	392 102
135, 218	Same..... Meter for measuring liquids, gases, &c.....	Sept. 2, 1873	12	5	4	243
142, 336	Same..... Mustache-shield for drinking-cups.....	Nov. 18, 1873	389	130	4	533
144, 614	Same..... Gearing.....	Dec. 16, 1873	417	137	4	643
145, 499	Greenwalt, A. B., et al. (See Brubaker, A. M., assignor.)					
135, 907	Greenwood, G., Lawrence, Mass. Rotary cutter-head for matching boards.....	Feb. 18, 1873	489	158	3	192
142, 100	Greenwood, J., Rochester, N. Y. Hanger for shafting.....	Aug. 26, 1873	653	215	4	215
145, 942	Same..... Machine for forcing hoops on barrels.....	Dec. 30, 1873	841	274	4	700
143, 570	Greer, R., and W. J. Thomason, Raleigh, N. C. Dumping-wagon.....	Oct. 14, 1873	163	54	4	402
140, 773	Greer, S. V., Rocky Hill Station, Ky. Animal-trap and seed-safe combined.....	July 15, 1873	384	132	4	59
	Gregersen, J. A. (See Frantze, Tillesen & Gregersen.)					
139, 889	Gregg, A., Springborough, Ohio. Washing-machine.....	June 17, 1873	425	132	3	666
5, 707	Gregg, W. P., Boston, Mass. Roller-skate..... (Reissue).. Same..... same.....	Dec. 23, 1873 Apr. 22, 1873	822 685	268 216	4 3	688 446
138, 018	Gregory, C. A., assignor of one-half interest to W. M. Rice, Montreal, Canada. Fire safety line.....	July 29, 1873	874	286	4	115
141, 269	Gregory, G. H. (See Hubbell & Gregory.)					
138, 640	Gregory, G. W., Syracuse, N. Y. Truss.....	May 6, 1873	152	49	3	510
144, 975	Gregory, H., jr., Rockland, Me. Elastic anti-friction attachment for vessels' booms.....	Nov. 25, 1873	699	236	4	569
	Grellier, W. (See Kilborn, J., assignor.)					
143, 141	Gretter, V., Richland Township, Pa. Casing-spear.....	Sept. 23, 1873	717	246	4	333
138, 149	Gribben, J., et al. (See Shawk, G. W., assignor.)					
	Gridley, F. R., Saint Paul, Minn., assignor of one-half interest to T. Jordan, Indianapolis, Ind. Spring plate-washer.....	Apr. 22, 1873	797	254	3	456
	Gridley, N. C. (See Harvey, P., assignor.)					
	Gridley, N. C., et al. (See Morrison, J. C., assignor.)					
138, 749	Grier, W. W., Halton, Pa. Roller for window-curtains.....	May 13, 1873	262	82	3	529
136, 651	Griest, J. M., Plainfield, Ind. Attachment for sewing-machines.....	Mar. 11, 1873	278	93	3	277
144, 333	Griest, J. M., Delavan, Ill. Hemmer for sewing-machines.....	Nov. 4, 1873	133	45	4	489
	Griffin, J. (See Clarke, Bonzano & Griffin.)					
	Griffin, J., et al. (See Clark, T. C., assignor.)					
	Griffin, J. J. (See Harris, A., assignor.)					
134, 661	Griffin, M., Brooklyn, N. Y. Cradle.....	Jan. 7, 1873	155	51	3	19
137, 675	Griffin, T. J., Brooklyn, N. Y. Spring cot.....	Apr. 8, 1873	362	112	3	398
137, 197	Griffing, C. S. S., Salem, Ohio. Carriage-spring.....	Mar. 25, 1873	772	255	3	336
136, 595	Griffing, J., assignor to self and B. H. Smith, Ipswich, Mass. Mechanism for heading barrels.....	Mar. 11, 1873	232	78	3	273
140, 364	Griffing, J., Ipswich, Mass. Barrel-transporter.....	July 1, 1873	24	8	4	10
	Griffith, G. S., & Co. (See Conradt, C. J., assignor)..... (Design.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 281	Griffith, J., and W. F. Miller, assignors to selves and C. D. B. Eisman, Adamsburgh, Pa. Car-coupling	Sept. 30, 1873	841	289	4	359
	Griffith, W. (See Moody, C., assignor.)					
136, 433	Grigg, G. S., Pottsville, Pa. Scroll-sawing machine	Mar. 4, 1873	68	24	3	251
138, 496	Griggs, O. B., Mansfield Centre, Conn. Station-indicator	May 6, 1873	23	8	3	499
135, 544	Grigsby, B., and T. C. Braselton, Princeton, Ind. Coffee-pot	Feb. 4, 1873	141	45	3	138
143, 447	Grimes, T. E., Fremont, Ohio. Saw-set	Oct. 7, 1873	43	15	4	384
5, 499	Grimm, J., Darlington Township, Pa. Coal-drilling machine	July 22, 1873	792	259	4	101
138, 082	Grimm, L., and J. Corvin, Magdeburg, Prussia. Liquids for heating, by means of pipes, &c	Apr. 22, 1873	745		3	451
	Grimmer, H. A. (See Mickels, F., assignor.)					
135, 800	Grimshaw, W. S., Pittsfield, Ill. Wheel-plow	Feb. 11, 1873	383	123	3	169
142, 565	Grinstead, W., Washington, D. C. Strap-fastening for trunks, &c	Sept. 9, 1873	227	74	4	272
	Griscom, S. E. (See Bullock, M. C., assignor.)					
	Same.....(See Larer, D., assignor.)					
145, 863	Griscom, W. M., assignor to Reading Hardware Manufacturing Company, Reading, Pa. Sash-cord guide	Dec. 23, 1873	746	244	4	682
138, 497	Griswold, A. D., Rocky Hill, Conn. Cotton-seed planter	May 6, 1873	24	9	3	499
143, 142	Griswold, C. L., Chester, Mass. Gimlet-handle	Sept. 23, 1873	717	246	4	333
145, 733	Griswold, G. G., New York, N. Y. Umbrella	Dec. 23, 1873	638	208	4	673
136, 596	Griswold, G. W., Factoryville, Pa. Stew-pan	Mar. 11, 1873	232	78	3	273
135, 473	Grochau, A., Du Luth, Minn. Railway-tank feeder	Feb. 4, 1873	74	23	3	133
136, 155	Groff, J. D., and K. H. Wilson, Oxford, Pa. Pad for harness	Feb. 25, 1873	720	232	3	221
138, 327	Groff, W. S., Mahanoy City, Pa. Feather-renovator	Apr. 29, 1873	991	312	3	479
139, 142	Gronberg, O. H., Ferrysburgh, and W. M. Ferry, Grand Haven, Mich. Edging-machine	May 20, 1873	619	193	3	571
143, 071	Grosh, W. B., and S. H. Foreman, Reading, Pa. Ironing-table	Sept. 23, 1873	665	228	4	328
140, 623	Grosjean, F., New York, N. Y. Table dish-stand	July 8, 1873	256	87	4	40
	Gross, E. L., et al. (See Forden, J. M., assignor.)					
139, 143	Gross, E. L., assignor to self, J. M. Forden, J. K. Welter, J. O. Sloan, and J. Rayburn, Springfield, Ill. Seed-dropper	May 20, 1873	620	193	3	571
144, 669	Gross, H., assignor to Hall's Safe and Lock Company, Cincinnati, Ohio. Hinge for safe and vault doors	Nov. 18, 1873	433	147	4	536
144, 670	Same.....Permutation-lock	Nov. 18, 1873	434	147	4	536
145, 171	Same.....same	Dec. 2, 1873	124	41	4	595
6, 826	Gross, M., and B. B. Zippert, New York, N. Y. Muff	Aug. 26, 1873			4	212
6, 827	Same.....Ladies' fur muff	Aug. 26, 1873			4	212
	Grosvenor, C. F. (See Tucker, W., assignor.)					
	Grosvenor, J. P., Lowell, Mass. Machine for planing curved surfaces.....(Extension)	Dec. 27, 1873			4	671
138, 083	Grote, G. W., Saint Catherine's, Canada. Invalid-bedstead	Apr. 22, 1873	746	236	3	451
140, 914	Grotz, C., assignor to self, D. B. Dennison, J. T. Hackworth, J. G. Hutchison, W. T. Major, and A. Johnston, Ottumwa, Iowa. Rotary steam-engine	July 15, 1873	511	172	4	69
137, 915	Ground, R. B., Edwardsville, assignor by mesne assignment to N. D. Sweeney, Marine, Ill. Plow	Apr. 15, 1873	581	183	3	429
138, 150	Grout, C. P., New York, N. Y. Dentists' tool	Apr. 22, 1873	798	255	3	456
	Grove, C. N. (See Broadbooks, P., assignor.)					
	Grove, W. H. (See Pusey, S. J., assignor.)					
136, 506	Grover, C. B., Cambridge, Mass. Sewing-machine cover	Mar. 4, 1873	134	43	3	256
138, 800	Grover, D. L., Groton, N. Y. Butter-paddle	May 13, 1873	307	95	3	533
140, 497	Same.....Bee-hive	July 1, 1873	131	45	4	19
141, 136	Grover, H. C., Nunda, N. Y. Washing-machine	July 22, 1873	730	242	4	96
139, 505	Grover, W. O., Boston, Mass. Hot-air furnace	June 3, 1873	54	17	3	613
134, 540	Groves, G. A., East Clarkson, N. Y. Gang-plow	Jan. 7, 1873	35	11	3	10
140, 498	Groves, J., Ellicott City, Md. Metallic arch for tunnels, &c	July 1, 1873	132	45	4	19
142, 337	Groves, J. F., Whitefield County, Ga. Truss	Sept. 2, 1873	14	5	4	243
136, 056	Groves, J. R., Hightstown, N. J., assignor to E. H. Ropes, Elizabeth, N. J. Ironing-table	Feb. 18, 1873	612	201	3	201
144, 272	Grow, W. H., and C. M. Sloan, Darien, Kans. Land-roller	Nov. 4, 1873	87	28	4	485
136, 237	Growdon, J., New Enterprise, Pa. Car-coupling	Feb. 25, 1873	782	252	3	226
137, 837	Grubenbecher, H., New York, N. Y. Carving-machine	Apr. 15, 1873	517	161	3	423
139, 952	Grudin, C. F., Boston, Mass. Sofa-bedstead	June 17, 1873	476	150	3	670
142, 566	Grundy, F., Morrisonville, Ill. End-gate for wagons	Sept. 9, 1873	228	74	4	272
140, 700	Grüniger, O., New York, N. Y. Brake-mechanism	July 8, 1873	318	108	4	45
137, 676	Guebbard, A., and A. P. Tronchon, Paris, France. Recording-apparatus for vehicles	Apr. 8, 1873	363	112	3	398
136, 434	Guelle, L., Hoboken, N. J. Hoop and train skirt	Mar. 4, 1873	69	24	3	251
	Guest, A. (See Guest, J. H., assignor.)					
139, 953	Guest, J. H., assignor to A. Guest, Brooklyn, N. Y. Electrical thermostat	June 17, 1873	477	150	3	670
143, 344	Same.....District and fire-alarm telegraph	Sept. 30, 1873	901	{ 306 } { 307 }	4	364
143, 691	Same.....Electrical and thermostatic fire-alarm, and circuit therefor	Oct. 14, 1873	272	90	4	411
144, 535	Same.....District and fire-alarm telegraph	Nov. 11, 1873	313	{ 105 } { 106 }	4	515
138, 019	Guilder, A. R., Minneapolis, Minn. Middlings-separator	Apr. 22, 1873	686	217	3	446
145, 170	Same.....Middlings-purifier	Dec. 2, 1873	122	40, 41	4	595
137, 608	Guilfoyle, W., New York, N. Y. Horse-collar	Apr. 8, 1873	304	94	3	393
135, 474	Guinot, G., Milton, Fla. Ice-cream freezer	Feb. 4, 1873	74	23	3	133
5, 362	Gulden, J., Key Port, N. J. Soldering-apparatus	Apr. 22, 1873	868	275	3	461
140, 411	Gulick, C. W., New Brunswick, N. J. Iron railway-tie	July 1, 1873	60	21	4	13
140, 365	Gullett, B. D., Amite City, La. Cotton-gin	July 1, 1873	25	9	4	10
136, 057	Gullmann, C., Paterson, N. J. Sewing-machine	Feb. 18, 1873	613	{ 201 } { 202 }	3	201
143, 756	Gum, J., assignor of one-half interest to F. Kane, Marseilles, Ill. Car-coupling	Oct. 21, 1873	353	117	4	427
	Gump, C. A., et al. (See Curtner, I., assignor.)					
145, 998	Gundersen, G., Chicago, Ill. Breech-loading fire-arm	Dec. 30, 1873	887	288	4	703
144, 671	Gundlach, E., Hackensack, N. J. Mangle	Nov. 18, 1873	435	147	4	536
138, 395	Gunnulson, O., Christiana, Wis. Dumping-wagon	Apr. 29, 1873	1, 044	329	3	483
138, 396	Günther, G., New York, N. Y. Bird-cage	Apr. 29, 1873	1, 045	329	3	483
134, 881	Günther, H., assignor to self and C. Lupprian, New York, N. Y. Knitting-machine	Jan. 14, 1873	356	113	3	49
144, 976	Gurley, B. B., Minneapolis, Minn. Letter-box	Nov. 25, 1873	700	236	4	569
141, 137	Gurley, J. W., Petersburg, Va. Abdominal supporter	July 22, 1873	730	242	4	96
	Gurley, W., executor. (See Littlejohn, H.)					
138, 883	Guscetti, F., assignor of one-half interest to C. W. Smith, New York, N. Y. Channel-opener for boots, &c	May 13, 1873	381	119	3	539
141, 786	Gustin, J. M., Wilmington, O. Cultivator	Aug. 12, 1873	346	114	4	171
138, 498	Gustin, M., Troy, Pa. Flash-light signal-recorder	May 6, 1873	25	9	3	500
	Guthrie, S. (See Kane, J. F., assignor.)					
	Guthrie, T. H. (See Long, S. W., assignor.)					

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137, 072	Gutzkow, F. (See Meidinger, H., assignor.) Gutzkow, F., San Francisco, Cal. Manufacture of boracic acid.	Mar. 25, 1873	658	218	3	328
	Guy, G. (See Manuel, E., assignor.) Gwyn, E., et al. (See Wrealsb, A., assignor.)					
145, 646	Gwynn, H., Baltimore, Md. Carriage-wheel.	Dec. 16, 1873	550	181	4	654
138, 641	Gwynn, S., assignor to the American Metalline Company, New York, N. Y. Journal-box lining.	May 6, 1873	153	49	3	510
138, 642	Same..... Journal-box lining.	May 6, 1873	154	49	3	510
138, 643	Same..... same.	May 6, 1873	154	50	3	510
139, 644	Same..... same.	May 6, 1873	155	50	3	510
138, 645	Same..... same.	May 6, 1873	155	50	3	510
138, 466	Same..... same.	May 6, 1873	156	50	3	510
140, 774	Same..... same.	July 15, 1873	385	132	4	59
140, 775	Same..... same.	July 15, 1873	386	132	4	59
137, 362	Haack, J., Hoboken, N. J., and S. Molot, New York, N. Y. Scarf-ring.	Apr. 1, 1873	77	25	3	363
138, 561	Haag, G. W., Cairo, Pa. Potato-digger.	May 6, 1873	85	27	3	504
	Haan, H. A. (See Stehlin, C. V. and J., & Haan.) Haarvig, J. A., Chicago, Ill. Waistband fastening for pantaloons, &c.	Nov. 4, 1873	134	45	4	489
144, 334	Haas, D. Y., Hepler, Pa. Machine for shaving leather.	Nov. 4, 1873	87	29	4	485
144, 273	Haas, H., New York, N. Y. Pedal for musical-instruments.	Oct. 7, 1873	93	33	4	388
143, 509	Haas, I., et al. (See Foglesong, W., assignor.) Haber, M. (See Karg, M., assignor.)					
139, 244	Haberfield, J. G., Wheeling, W. Va. Door and bit of puddling and boiling furnaces.	May 27, 1873	726	229	3	587
135, 986	Haberstich, P., assignor of one-half interest to C. Mikinas, Dayton, Ohio. Barber's chair.	Feb. 18, 1873	553	182 183	3	197
142, 228	Hackett, E., Ulysses, Pa. Water-wheel.	Aug. 26, 1873	760	250	4	223
140, 499	Hackett, E. M., New York, N. Y. Closing hatchways. Hackett, R. (See Whittier, R., assignor.) Hackworth, J. T., et al. (See Grotz, C., assignor.)	July 1, 1873	133	45	4	19
133, 036	Hackworth, J. W., Darlington, England. Valve-gear for steam-engines.	Jan. 21, 1873	508	164	3	76
144, 845	Haddock, W., Pittsburgh, Pa. Cut-nail machine.	Nov. 25, 1873	596	203	4	560
138, 397	Hadley, A. N., Richmond, Ind. Balanced valve.	Apr. 29, 1873	1,045	329	3	483
140, 035	Hadley, B. H., Brooklyn, N. Y. Machinery for bending the edges of boot and shoe soles.	June 17, 1873	547	173	3	676
143, 237	Same..... Boot and shoe channeling-machine.	Sept. 30, 1873	803	277	4	356
	Hadley, D. J. (See Crane & Hadley.) Hadley, E., Chicopee Falls, Mass. Egg-beater.	May 6, 1873	157	51	3	510
134, 598	Haering, H., assignor to self and H. Alles, New York, N. Y. Pole-clamp.	Jan. 7, 1873	95	30	3	14
143, 448	Haering, H., and H. Alles, New York, N. Y. Scaffold pole-clamp.	Oct. 7, 1873	41	15	4	384
	Haertle, A. (See Heckenbach & Haertle.) Hafford, A. T., assignor of one-half interest to F. J. Donovan, Saint Louis, Mo. Submerged force-pump.	May 20, 1873	491	155	3	561
146, 063	Hafner, J. A., Pittsburgh, Pa. Mill-spindle.	Dec. 30, 1873	496	305	4	708
139, 144	Hageman, J., Williamsburgh, Ohio. Wheel for vehicles.	May 20, 1873	621	194	3	571
143, 449	Hagemann, G. A., Copenhagen, Denmark. Mordant for dyeing.	Oct. 7, 1873	45	.....	4	384
135, 331	Hagerstrom, A. G., Red Wing, Minn. Horse-power.	Jan. 28, 1873	782	253	3	110
135, 332	Same..... Machine for sawing and splitting wood.	Jan. 28, 1873	783	254	3	110
142, 462	Same..... Thrashing-machine.	Sept. 2, 1873	125	41	4	252
142, 693	Hagerty, J. S., Baltimore, Md. Street-lamp.	Sept. 9, 1873	331	111	4	280
145, 172	Hagerty, W., Philadelphia, Pa. Stove-grate.	Dec. 2, 1873	125	41	4	595
142, 160	Haggerty, J., Corry, Pa. Check-runner.	Aug. 26, 1873	704	232	4	219
140, 194	Hague, C. A., Hudson, N. Y. Circulating valve for fire-engines.	July 24, 1873	707	222	3	697
142, 694	Hahn, F. E., assignor to O. C. Ferris and F. B. Miles, Philadelphia, Pa. Boring-mill.	Sept. 9, 1873	331	111	4	281
146, 064	Same..... Work-holding device.	Dec. 30, 1873	946	305	4	708
138, 084	Hahn, T., Stuttgart, Germany. Watchman's time-check.	Apr. 22, 1873	748	236	3	451
135, 333	Haight, H. J., New York, N. Y. Artist's scraper.	Jan. 28, 1873	786	254	3	111
140, 366	Haight, W. H., and T. S. Gladding, Leavenworth, Kans. Roofing composition.	July 1, 1873	26	.....	4	10
	Hail, N. B., et al. (See Ralston, J., assignor.) Haines, C. L., Carmel, Me. Mop-holder.	Mar. 18, 1873	506	167	3	304
136, 912	Haines, D. E., Uniontown, D. C. Dumping-wagon.	Apr. 29, 1873	914	288	3	473
141, 504	Haines, J. W., Cambridgeport, Mass. Silvered-glass door-knob.	Aug. 5, 1873	84	26	4	142
	Haines, R. (See Pelham, A., assignor.) Hair, J. H., Galesburgh, Ill. Animal-trap.	June 17, 1873	549	173	3	676
143, 282	Hairston, P. C., Crawfordsville, Miss. Wheel for vehicles.	Sept. 30, 1873	841	289	4	359
140, 268	Haistings, W., sr., Fowler, Ill. Three-horse equalizer.	June 24, 1873	766	242	3	702
	Hait, C. E. (See Huntley, G. R., assignor.) Hake, E. H., Canfield, Ohio. Trammel for lifting-jacks.	Feb. 25, 1873	720	233	3	221
136, 156	Halburt, W. G., Columbus, Miss. Cultivator.	Jan. 7, 1873	155	51	3	19
134, 662	Haldeman, J. S., assignor to self and H. E. Clark, Kansas City, Mo. Lifting-jack.	Apr. 1, 1873	77	25	3	363
137, 363	Hale, A. W., New York, N. Y. Meat-mincer. (Extension).	Mar. 15, 1873	.....	.....	3	244
134, 541	Hale, D. W., Middletown, Conn. Die for forming sewing-machine shuttles.	Jan. 7, 1873	36	11	3	10
	Hale, E. J., Foxcroft, and C. H. Chandler, Brownsville, Me. Lamp. (Extension).	Mar. 1, 1873	.....	.....	3	189
5, 369	Hale, H. F. T., Bay City, Mich. Reservoir-stove. (Reissue).	Apr. 22, 1873	880	278	3	462
138, 884	Hale, H. S., assignor to Hale, Kilburn & Co., Philadelphia, Pa. Picture-frame.	May 13, 1873	382	119	3	539
146, 065	Hale, H. S., Philadelphia, Pa. Chair.	Dec. 30, 1873	947	305	4	708
146, 066	Same..... Car-window shield.	Dec. 30, 1873	948	306	4	709
146, 067	Hale, H. S., assignor to Hale, Kilburn & Co., Philadelphia, Pa. Wooden mat for picture-frames.	Dec. 30, 1873	948	306	4	709
145, 059	Hale, J. H., and A. C. Whitney, Boston, Mass. Feed-water heater.	Dec. 2, 1873	17	7	4	587
	Hale, Kilburn & Co. (See Hale, H. S., assignor.) Hale, W. P., Lock Haven, Pa. Turbine water-wheel.	Feb. 11, 1873	303	96	3	163
135, 707	Haley, J. (See Bennett, Krebs & Haley.) Haley, J., Pittsburgh, Pa. Glass-press.	May 13, 1873	263	82	3	529
138, 750	Haley, J. B. (See Lowe, H. C., assignor.) Haley, J. J., et al. (See Palmer & Spencer, assignors.)					
136, 913	Hall, A., Perth Amboy, N. J. Furnace-block press.	Mar. 18, 1873	507	168	3	304
138, 751	Hall, A., New York, N. Y. Powder and shot charger for fire-arms.	May 13, 1873	265	82	3	529
145, 295	Hall, A. J., Farmington, N. H., assignor of one-half interest to J. F. Cloutman. Shoe-knife.	Dec. 9, 1873	236	79	4	617
140, 915	Hall, B., Saint Louis, Mo. Railway-switch.	July 15, 1873	512	172	4	69
141, 711	Hall, C., New York, N. Y. Machine for heading bolts.	Aug. 12, 1873	276	90	4	165
138, 247	Hall, C. F., Rockford, Ill. Carriage-spring.	Apr. 29, 1873	915	288	3	473
141, 555	Hall, C. H., Trenton, N. J., and R. Knott, Brooklyn, N. Y. Glove-fastening.	Aug. 5, 1873	125	39	4	145
137, 609	Hall, C. M., Yates City, Ill. Adjustable brace-coupling.	Apr. 8, 1873	304	94	3	393
138, 801	Same..... Stock-feeder.	May 13, 1873	308	95	3	533

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
5, 601	Hall, C. M., and D. E., Uniontown, Ill., said D. E. assignor to said C. M. Hall. Cultiva-					
136, 238	tor (Reissue)	Oct. 14, 1873	325	108	4	414
	Hall, C. S., Rochester, N. Y. Thrashing-machine	Feb. 25, 1873	782	253	3	226
	Hall, D. E. (See Hall, C. M. and D. E.) (Reissue.)					
	Hall, E. & Co. (See Warner, A., assignor) (Reissue.)					
141, 787	Hall, F. E., Boston, Mass. Hose-pipe nozzle	Aug. 12, 1873	348	115	4	171
145, 345	Hall, F. H., Hackensack, N. J. Process of manufacturing artificial marble, and veining					
	the same	Dec. 9, 1873	279	.....	4	620
	Hall, G., et al. (See Thurber, A. E., assignor.)					
139, 954	Hall, G., assignor of one-half interest to G. Clubb, Joliet, Ill. Medical compound or					
	salve	June 17, 1873	478	.....	3	670
139, 985	Hall, G., Morgantown, W. Va. Hand seed-sower	June 10, 1873	326	101	3	651
139, 955	Hall, H. B., New York, N. Y. Package of caustic soda or alkali	June 17, 1873	478	150	3	670
136, 157	Hall, H. L., Woodbridge, Iowa. Hand corn-husker	Feb. 25, 1873	721	233	3	221
140, 776	Hall, H. P., Akron, N. Y. Barrel-making machinery	July 15, 1873	386	133	4	59
139, 385	Hall, I., assignor to self and Damon, Thomas & Lewis, Boston, Mass. Boot	May 27, 1873	843	269	3	597
	Hall, J., et al. (See Roher, J. B., assignor) (Design.)					
142, 567	Hall, J., assignor to L. I. Hall, Quincy, Mass. Stove-pipe for vessels	Sept. 9, 1873	228	74	4	272
145, 734	Hall, J., Watertown, Mass. Toy money-box	Dec. 23, 1873	639	209	4	673
137, 838	Hall, J. D., assignor to M. E. I. Hall, Brooklyn, N. Y. Hot-air furnace	Apr. 15, 1873	518	161	3	423
144, 335	Hall, J. F., Albia, Iowa. Flat-iron heater	Nov. 4, 1873	134	45	4	489
	Hall, J. H. (See Quincy, E. W., assignor.)					
135, 801	Hall, J. H., Ansonia, Conn. Bustle	Feb. 11, 1873	384	124	3	169
143, 979	Hall, J. H., Chicago, Ill. Folding-seat	Oct. 28, 1873	564	187	4	454
136, 239	Hall, J. L., Cincinnati, Ohio. Safe-door hinge	Feb. 25, 1873	783	253	3	226
140, 824	Hall, J. R., and C. H. Ellis, said Hall assignor to said Ellis, Salem, Ohio. Meat and					
	vegetable cutter	July 15, 1873	431	{ 146 } { 147 }	{ 4 }	63
	Hall, J. S. (See Wall, P., assignor.)					
144, 760	Hall, J. S., Pittsburgh, Pa. Plow	Nov. 18, 1873	511	173	4	543
	Hall, L. C., et al. (See Pelham, A., assignor.)					
	Hall, L. I. (See Hall, J., assignor.)					
	Hall, L. W., et al. (See Cleaveland, G. D., assignor.)					
	Hall, M. E. J. (See Hall, J. D., assignor.)					
145, 657	Hall, M. H., Philadelphia, Pa. Machine for cutting leather for boot and shoe heels	Dec. 16, 1873	551	181	4	654
	Hall, N. C. (See Smith, L. B., assignor.)					
141, 644	Hall, N. P., Janesville, Wis. Music-leaf turner	Aug. 12, 1873	220	70	4	161
	Hall, O. B., 2d. (See Creighton, J. R., assignor) (Reissue.)					
140, 500	Hall, P. W., Calvert, Tex. Combination lock	July 1, 1873	133	46	4	19
142, 695	Same.....Permutation lock	Sept. 9, 1873	332	{ 111 } { 112 }	{ 4 }	281
	Hall, S. G. (See Allen & Hall.)					
6, 341	Hall, T., Jersey City, N. J. Show-card for head-nets (Design) ..	Jan. 14, 1873	.....	.....	3	38
140, 269	Hall, T., Florence, Mass. Vise	June 24, 1873	766	242	3	702
139, 574	Hall, T., & J. Newton, Lawrence, Mass. Mangling or wringing machine	June 3, 1873	112	37	3	618
141, 874	Hall, W., Brookline, Mass. Bolt for safe-doors, &c.	Aug. 19, 1873	439	{ 143 } { 144 }	{ 4 }	188
136, 044	Hall, W. D., Memphis, Tenn. Automatic fan	Feb. 18, 1873	602	198	3	201
135, 114	Hall, W. N., Mexia, Tex. Nails	Jan. 21, 1873	567	184	3	81
138, 885	Same.....Combined adjustable fire-fender, grate, and andiron	May 13, 1873	382	119	3	539
145, 864	Same.....Combination padlock	Dec. 23, 1873	747	244	4	682
145, 865	Same.....Keyhole-guard	Dec. 23, 1873	747	244	4	682
144, 901	Hall, Z., Dennis, Mass. Anchor	Nov. 25, 1873	638	217	4	564
	Hall's Safe and Lock Company. (See Gross, H., assignor.)					
138, 648	Halladay, D., Batavia, Ill. Wind-wheel	May 6, 1873	157	51	3	510
143, 143	Hallas, J. G., and W. N. Needen, assignors to the Benedict and Burnham Manufacturing					
	Company, Waterbury, Conn. Wick-raiser	Sept. 23, 1873	718	247	4	333
134, 798	Hallefas, W. J., Brooklyn, N. Y. Gripping-tongs	Jan. 14, 1873	282	91	3	43
136, 240	Haller, E. G., Carlisle, Pa. Fruit-jar	Feb. 25, 1873	784	254	3	227
140, 916	Same.....same	July 15, 1873	514	173	4	69
136, 832	Hallett, R. W., Brooklyn, N. Y. Raising sunken vessels	Mar. 18, 1873	442	146	3	299
138, 398	Halliburton, D. F., Rutherford Station, Tenn. Fertilizer-distributor	Apr. 29, 1873	1,046	329	3	484
135, 545	Halliday, W. P., Cairo, Ill. Railway ferry-track platform	Feb. 4, 1873	141	45	3	138
	Hallidie, A. S. (See Martin, T. M., assignor.)					
145, 999	Hallock, W. R., assignor to self and Pierson & Morehouse, Westfield, N. J. Oil-can	Dec. 30, 1873	889	288	4	704
143, 692	Halsey, E., San José, Cal. Locking-latch for doors	Oct. 14, 1873	273	90	4	411
	Halstead, Couse & Co. (See Halstead & Wheeler, assignors.)					
142, 848	Halstead, I. T., Fredonia, N. Y. Ore-washer	Sept. 16, 1873	473	161	4	302
136, 914	Halstead, M., and J. L. Wheeler, Brooklyn, assignors to Halstead, Couse & Co., New					
	York, N. Y. Putting up and preserving cider	Mar. 18, 1873	508	168	3	304
	Halvorsen, H., Nashua, N. H. Lamp	Sept. 20, 1873	.....	.....	4	295
137, 135	Halvorsen, T., New York, N. Y. Device for sharpening-scissors	Mar. 25, 1873	712	236	3	332
135, 475	Ham, J. T., Liberty, Ind. Excavator	Feb. 4, 1873	75	24	3	133
137, 198	Hamar, A., Philadelphia, Pa. Torpedoes for oil-wells	Mar. 25, 1873	772	255	3	336
137, 439	Same.....Can for transporting nitro-glycerine	Apr. 1, 1873	144	47	3	369
137, 440	Same.....Manufacture of nitro-glycerine	Apr. 1, 1873	144	47	3	369
137, 916	Same.....Torpedo for oil-wells	Apr. 15, 1873	582	183	3	429
135, 425	Hamburjer, E., Detroit, Mich. Combined cradle and rocking-chair	Feb. 4, 1873	30	9	3	130
137, 917	Same.....Extension-table	Apr. 15, 1873	582	183	3	429
134, 599	Hamburger, M., I. J. Siskind, and A. Klein, New York, N. Y. Apparatus for filling, pol-					
	ishing, and varnishing moldings	Jan. 7, 1873	95	31	3	4
144, 902	Hamel, D., Holyoke, Mass. Stuff-regulator for paper-machine	Nov. 25, 1873	639	217	4	564
6, 482	Hamer, J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet..... (Design) ..	Mar. 4, 1873	.....	.....	3	245
6, 483	Same.....same..... (Design) ..	Mar. 4, 1873	.....	.....	3	245
6, 575	Same.....same..... (Design) ..	Apr. 8, 1873	.....	.....	3	387
6, 576	Same.....same..... (Design) ..	Apr. 8, 1873	.....	.....	3	387
139, 668	Hamil, R. C., Harrisville, Tex. Riding-saddle	June 10, 1873	210	68	3	642
139, 669	Hamilton, D. S., Elmira, N. Y. Road-scraper	June 10, 1873	211	69	3	642
139, 986	Hamilton, F. C., assignor to E. J. Brooks, New York, N. Y. Seal-lock	June 10, 1873	326	101	3	651
	Hamilton, H. (See Vanorman, O., assignor.)					
145, 102	Hamilton, H. N., White Plains, N. Y. Fountain pen	Dec. 2, 1873	59	19	4	590
	Hamilton, J. A. (See Rodgers, A. C., assignor.)					
146, 068	Hamilton, J. B., Loudon, Tenn. Water-wheel	Dec. 30, 1873	949	306	4	709
144, 977	Hamilton, J. T., Boone County, and E. F. Conner, Decatur, Ind., said Conner assignor to					
	said Hamilton. Lifting-jack	Nov. 25, 1873	700	236	4	569
141, 138	Hamilton, L., Panora, Iowa. Corn-harvester	July 22, 1873	731	243	4	96

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Hamilton Steele-wheel Company. (<i>See</i> Hamilton, W. G., assignor. (Reissue.)					
136, 320	Hamilton, T. F., New Haven, Conn. Corsets	Feb. 25, 1873	857	276	3	232
136, 915	Hamilton, W., assignor to self and J. L. La Moree, Neversink, N. Y. Machine for making ox-shoes	Mar. 18, 1873	509	168	3	304
137, 073	Hamilton, W., Erie, Pa. Steam-lubricator	Mar. 25, 1873	660	219	3	328
140, 270	Same	June 24, 1873	768	242	3	702
	Hamilton, W. G. (<i>See</i> Steers, T., assignor.)					
5, 298	Hamilton, W. G., Ramapo, N. Y., assignor to the Hamilton Steele-wheel Company. Manufacture of car-wheels (Reissue.)	Feb. 25, 1873	894		3	235
144, 536	Hamilton, W. T., Dublin, Ireland. Machinery for cutting dovetails	Nov. 11, 1873	314	{ 106 107 }	{ 4 4 }	{ 515 515 }
	Hamlin, R. D. (<i>See</i> Liddell, W., assignor.)					
6, 966	Hamm, S., assignor of one-half interest to S. Oppenheimer, Philadelphia, Pa. Toy-target	Oct. 28, 1873			4	452
143, 144	Hamm, S., Philadelphia, Pa. Suspender-buckle	Sept. 23, 1873	719	247	4	333
144, 091	Hamm, S., Philadelphia, assignor of one-half interest to S. Oppenheimer, Philadelphia, Pa. Suspenders	Oct. 28, 1873	662	218	4	462
6, 759	Hamm, W. B., Philadelphia, Pa. Watch-chain charm (Design)	July 8, 1873			4	36
	Hammon, H. F. (<i>See</i> Nelson, A. S., assignor.)					
135, 802	Hammond, D., M. Adler, and J. Abbott, Canton, Ohio. Iron bridge	Feb. 11, 1873	384	{ 124 125 }	{ 3 3 }	{ 169 169 }
138, 649	Hammond, E., Cumberland, Md. Mortising-machine	May 6, 1873	159	51	3	510
138, 020	Hammond, G. B., Putnam, Conn., and J. A. Tucker, Attleborough, Mass. Shuttle-binder for looms	Apr. 22, 1873	688	217	3	447
145, 648	Hammond, J. E., assignor of two-thirds interest to D. P. Gardner and E. Pierce, New Bedford, Mass. Hinged mast for vessels	Dec. 16, 1873	552	181	4	654
	Hammond, S. T. (<i>See</i> Paige, W. H., assignor.)					
134, 799	Hammond, W. H., Syracuse, Mo. Can for preserving fruits, &c	Jan. 14, 1873	283	92	3	43
142, 016	Same. Eave-trough fastening	Aug. 19, 1873	556	184	4	197
144, 761	Same. Wash-boiler	Nov. 18, 1873	512	174	4	543
	Hampson, G. J. (<i>See</i> Gorrell, T., assignor.)					
	Hampton, I. H. (<i>See</i> Palm, T. F., assignor.)					
140, 917	Hanchett, F. P., Nepeskun, Wis. Railway-switch	July 15, 1873	514	173	4	69
	Hanchett, O. R. (<i>See</i> Selden & Hanchett.)					
	Hancock, G. (<i>See</i> Leonard & Hancock.)					
136, 721	Hancin, J. O., Paris, France. Apparatus for crushing, grinding, and mixing molding-sand, &c	Mar. 11, 1873	336	111	3	281
134, 746	Handren, J. W., Jersey City, N. J. Steam-pump	Jan. 14, 1873	239	77	3	40
135, 426	Same	Feb. 4, 1873	30	9	3	130
140, 271	Handy, T., Springfield, Ill. Self-loading wagon	June 24, 1873	769	243	3	703
139, 575	Hanford, J. M., and J. Wood, Middletown, N. Y. Dumping-car	June 3, 1873	112	37, 38	3	618
	Hanford, T. (<i>See</i> Cooke & Hanford.)					
	Hankey, A., et al. (<i>See</i> Corser, G. A., assignor.)					
139, 145	Hankinson, W. H., New York, N. Y. Carpet-beater	May 20, 1873	621	194	3	571
	Hanley, M. R. (<i>See</i> Mullin, R. J., assignor.)					
139, 060	Hanley, M. R., Providence, R. I. Detachable boot and shoe tip	May 20, 1873	541	170	3	565
135, 115	Hanna, A., Dover, Ky. Door-check	Jan. 21, 1873	567	185	3	81
5, 422	Hanna, E. S., Pittsburgh, Pa. Paper washer (Reissue)	May 20, 1873	706	222	3	578
145, 416	Hanna, H., Columbus, Ohio. Machine for bending wood	Dec. 9, 1873	332	113	4	625
141, 047	Hanna, W. H., Chico, Cal. Shoemakers' pincers	July 22, 1873	648	218	4	89
144, 903	Same. Shank-laster	Nov. 25, 1873	639	217	4	564
139, 576	Hannah, J. W., Sticklersville, Mo. Washing-machine	June 3, 1873	113	38	3	618
141, 346	Hannah, W. W., Hudson, N. Y. Animal and insect trap	July 29, 1873	947	308	4	121
	Hannan, J., et al. (<i>See</i> Pitrat, M. J., assignor.)					
140, 777	Hanour, P. J., Buffalo, N. Y. Combined water-cooler and show-case	July 15, 1873	388	133	4	59
144, 672	Hansen, C. A., and G. Harley, Guelph, Canada. Button-hole stitching-attachment for sewing-machines	Nov. 18, 1873	436	147	4	537
141, 048	Hansen, M., San Francisco, Cal. Scroll-sawing machine	July 22, 1873	649	219	4	89
	Hanson, C. N. (<i>See</i> Beach & Hanson.)					
143, 571	Hanvey, A., Steubenville, Ohio. Barrel-head	Oct. 14, 1873	164	55	4	402
142, 626	Hapgood, H. L., Athol, Mass. Sandpapering-machine	Sept. 9, 1873	275	90	4	276
	Hapgood, J. H. (<i>See</i> Chinnock, G. H., assignor.)					
137, 199	Happe, J., and W. Newman, New York, N. Y. Sewing-machine for quilting	Mar. 25, 1873	773	255	3	336
135, 219	Harang, T., Banana Grove Plantation, La. Steam-generator	Jan. 28, 1873	681	220	3	102
135, 220	Same. Duplex safety-valve	Jan. 28, 1873	682	220	3	203
145, 173	Harbaugh, C., Eaton, Ohio. Sash-balance	Dec. 2, 1873	126	41	4	595
	Harbin, J. (<i>See</i> Foster, Baylie & Harbin.)					
136, 507	Hard, H., Akron, Ohio. Spiral spring for furniture	Mar. 4, 1873	135	44	3	256
135, 803	Hard, J. A., Lawrence, Kans. Stud for fastening neck-ties	Feb. 11, 1873	390	125	3	170
137, 074	Same. Meat-chopper	Mar. 25, 1873	661	219	3	329
140, 412	Same. Neck-tie fastener	July 1, 1873	60	21	4	13
136, 158	Hard, P. C., Wadsworth, Ohio. Bed-bottom	Feb. 25, 1873	722	233	3	222
139, 061	Hardaway, T. J., Macon, Ga. Mail-bag	May 20, 1873	542	170	3	565
	Hardee, W. H. (<i>See</i> Bizzell, W. B., assignor.)					
135, 987	Hardekopf, C. J., Philadelphia, Pa. Kite	Feb. 18, 1873	554	183	3	197
145, 174	Harden, J. H., Philadelphia, Pa. Drawing-board trestle	Dec. 2, 1873	127	42	4	595
	Hardenbergh, C. M. (<i>See</i> Janney, C., assignor.)					
139, 386	Hardenbergh, C. M., A. L. Miner, and W. J. Fender, Minneapolis, Minn. Middlings purifier	May 27, 1873	844	270	3	597
134, 882	Hardenbergh, F. H., Hawley, Pa. Scroll-saw	Jan. 14, 1873	357	114	3	49
139, 004	Hardenbrook, J. J., and S. Belford, Columbus Grove, Ohio. Adjustable step-ladder	May 20, 1873	492	155	3	561
	Hardie, D. (<i>See</i> Richardson, J. H., assignor.)					
145, 500	Hardie, J. W., New York, N. Y. Stock and die	Dec. 16, 1873	418	137	4	643
142, 101	Harding, D., assignor to R. Kitson, Lowell, Mass. Feed-regulators for cotton openers, &c	Aug. 26, 1873	654	215	4	215
141, 928	Harding, E. and H., Delavan, Minn. Foot-power apparatus	Aug. 19, 1873	483	159	4	191
140, 778	Harding, E. J., Saint Louis, Mo. Abdominal supporter	July 15, 1873	329	134	4	59
143, 145	Harding, G. E., New York, N. Y. Furnace for the manufacture of iron and steel	Sept. 23, 1873	720	{ 247 248 }	{ 4 4 }	{ 333 333 }
	Harding, H. (<i>See</i> Harding, E. and H.)					
145, 649	Harding, H., Tuscaloosa, Ala. Railway rail-joint stiffener	Dec. 16, 1873	552	182	4	654
139, 713	Harding, J., Galesburgh, Ill. Shoe-lacings	June 10, 1873	257	81	3	645
139, 670	Harding, W., Brooklyn, N. Y. Composition for filling the grains of wood	June 10, 1873	212		3	642
143, 072	Hardy, C. H., assignor to J. Sully, trustee, Boston, Mass. Bench-plane	Sept. 23, 1873	666	228	4	328
141, 436	Hardy, D. D., assignor of one-half interest to H. R. Greene, Delavan, Ill. Rotary steam-engine	Aug. 5, 1873	23	8	4	137

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 565	Hardy, P. J., New York, N. Y. Bearing for shafting	Dec. 16, 1873	482	158	4	648
145, 866	Harfield, W. H., London, England. Windlass	Dec. 23, 1873	749	244	4	682
5, 614	Harger, D., Des Moines, Iowa. Furnace	O . 21, 1873	519	174	4	441
6, 832	Hargrave, J., Cincinnati, Ohio. Tailors' goose	S t. 2, 1873	.....	.....	4	241
6, 874	Same. Sad-iron handle	(Design) ..	.....	.....	4	270
135, 908	Hargrave, T. C., Boston, Mass. Steelyard-scales	Sept. 9, 1873	489	158	3	192
142, 627	Harlan, G. W., Cincinnati, Ohio. Carriage-spring	Feb. 18, 1873	276	91	4	276
	Harlan, J. (See Davis, W. H., assignor.)	Sept. 9, 1873	.....	.....	4	276
	Harlan, J. (See Metcalf, O., assignor.) .....	.....	.....	.....	4	276
135, 546	Harles, W., Washington, Mo. Excavating-cart	Feb. 4, 1873	143	45	3	139
	Harley, G. (See Hansen & Harley.) .....	.....	.....	.....	3	139
140, 195	Harlow, E., New York, N. Y. Elevator for hods, &c.	June 24, 1873	707	223	3	697
5, 678	Harlow, J. B., Portland, Me. Sofa-bedstead	Dec. 9, 1873	391	129	4	629
135, 643	Same. same	(Reissue) ..	.....	.....	4	629
	Same. same	Feb. 11, 1873	244	77	3	159
	Harms, A. G. (See Morrison & Harms)	(Reissue.) ..	.....	.....	3	159
140, 825	Harnach, W., New York, N. Y. Tassel for canes and umbrellas	July 15, 1873	432	147	4	63
	Harnden, J. W. (See Noble, O. W., assignor.) .....	.....	.....	.....	4	63
140, 413	Harness, B. R., Schooley's Station, Ohio. Stalk-cutter	July 1, 1873	61	22	4	13
144, 762	Harper, A. W., Philipsburgh, Pa. Spool-case	Nov. 18, 1873	513	174	4	543
136, 508	Harper, C. A., Burlington, N. J. Flour-bolt	Mar. 4, 1873	135	44	3	256
	Harper, H. W. (See Sayre & Shull, assignors)	(Reissue.) ..	.....	.....	3	256
134, 663	Harper, J. H., Pittsburgh, Pa. Attaching patterns to their supporting-plates	Jan. 7, 1873	156	51	3	19
141, 049	Harper, R., Glenn Mills, Pa. Metal-planing machine	July 22, 1873	650	219	4	89
143, 146	Harper, W., and W. Smith, Montreal, Canada. Trolling-spoon	Sept. 23, 1873	721	248	4	333
	Harrall, G. S. (See Dunn, W. G., assignor.) .....	.....	.....	.....	4	333
	Harrass, B. (See Gerike, H., assignor.) .....	.....	.....	.....	4	333
138, 328	Harrington, D., Southbridge, Mass. Shave for boots and shoes	Apr. 29, 1873	992	312	3	479
144, 537	Harrington, E. P., Volusia, N. Y. Car-brake	Nov. 11, 1873	316	107	4	515
	Harrington, G. (See Edison, T. A., assignor.) .....	.....	.....	.....	4	515
139, 146	Harrington, G., and G. D. Rollins, Springfield, Mass. Die for paper-collar machinery	May 20, 1873	622	194	3	571
137, 075	Harrington, L., Huntington, assignor to self, W. E. Downs, and T. L. Cornell, Birming- } ham, Conn. Apparatus for teaching mensuration	Mar. 25, 1873	662	{ 219 240 }	{ 3 3 }	{ 328 328 }
	Harrington, J. P. (See Elliott, Harrington & Davenport.) .....	.....	.....	.....	3	328
141, 270	Harrington, J. R., Brooklyn, N. Y. Carpet-lining machine	July 29, 1873	874	286	4	115
143, 345	Harrington, J. W., Cincinnati, and J. A. Yingling, Hamilton, Ohio. Pump for driven wells	Sept. 30, 1873	903	307	4	364
136, 159	Harrington, M. W., Homestead, Iowa. Gun-sight	Feb. 25, 1873	722	233	3	222
145, 650	Harris, A., assignor to self and J. J. Griffin, Philadelphia, Pa. Dry gas-meter	Dec. 16, 1873	553	182	4	654
135, 909	Harris, A. M., Columbus, Ga. Stove-grate	Feb. 18, 1873	490	159	3	192
6, 369	Harris, C., and E. Kummer, assignors to C. Harris & Son, Cincinnati, Ohio. Stove. (De- sign)	Jan. 28, 1873	.....	.....	3	100
6, 370	Same. Stove	(Design) ..	.....	.....	3	100
6, 371	Same. same	(Design) ..	.....	.....	3	100
6, 372	Same. same	(Design) ..	.....	.....	3	100
	Harris, C. & Son. (See Harris & Kummer, assignors)	(Design.) ..	.....	.....	3	100
	Harris, C. C. (See Keeler & Harris.) .....	.....	.....	.....	3	100
139, 671	Harris, D., Litchfield, Mass., assignor to self and J. Tremlett, Saint Louis, Mo. Boot- stretcher	June 10, 1873	212	69	3	642
	Harris, G. W. (See Carey, W. W., assignor.) .....	.....	.....	.....	3	642
143, 757	Harris, G. W., assignor to G. W. Gillette, New York, N. Y. Wrench for bung-bushings	Oct. 21, 1873	354	117	4	427
145, 867	Harris, G. W., Lancaster, N. Y. Fireman's extension-ladder	Dec. 23, 1873	751	245	4	682
136, 992	Harris, H., Tidouste, Pa. Extracting tubular casings from oil-wells	Mar. 18, 1873	573	191	3	310
141, 050	Harris, H., Newark, and F. Hewitt, Bloomfield, N. J. Sash-cord fastener	July 22, 1873	651	219	4	89
135, 910	Harris, J., Baltimore, Md. Sectional steam-boiler	Feb. 18, 1873	491	159	3	192
136, 372	Harris, J., New Carlisle, Ind. Turbine water-wheel	Mar. 4, 1873	20	7	3	247
137, 364	Harris, J. B., Ottawa, Ill. Millstone-dressing machine	Apr. 1, 1873	78	25	3	363
	Harris, J. C. (See Smith & Harris)	(Reissue.) ..	.....	.....	3	363
137, 610	Harris, J. F., and E. D. Childs, Charlestown, Mass. Child's chair	Apr. 8, 1873	305	94, 95	3	393
138, 021	Harris, J. P., Greensborough, Ga. Millstone-dress	Apr. 22, 1873	688	217	3	447
	Harris, J. R. (See Earickson & Harris.) .....	.....	.....	.....	3	447
139, 956	Harris, L. W., Oriskany Falls, N. Y. Self-acting switch	June 17, 1873	479	150	3	670
	Harris, M. (See Gilberts & Harris.) .....	.....	.....	.....	3	670
141, 556	Harris, S., Philadelphia, Pa. Weighing-scales	Aug. 5, 1873	126	40	4	145
5, 397	Harris, S. W., Hudson, N. Y., assignor of part interest to B. Ray, M. Martin, and J. W. Hoysradt. Furnace for smelting iron and other ores	May 6, 1873	240	75	3	517
142, 463	Harris, S. W., assignor to T. F. Miner, Albany, N. Y. Cinder-plate for blast-furnaces	Sept. 2, 1873	127	42	4	252
142, 464	Harris, S. W., Albany, assignor to B. Ray, Hudson, and I. Jagger and T. F. Miner, Albany, N. Y. Blast-furnace for smelting iron and other ores	Sept. 2, 1873	128	42	4	252
134, 664	Harris, T., and P. Dunn, Coté Saint Paul, Canada. Hammer-roll device for forming horseshoe-nails	Jan. 7, 1873	158	52	3	19
145, 296	Harris, W., Danville, Vt. Stereoscopic camera	Dec. 9, 1873	236	79	4	617
145, 297	Harris, W., Rochester, N. Y. Spool-stand	Dec. 9, 1873	237	80	4	617
	Harris, W. A. (See Babbitt & Harris.) .....	.....	.....	.....	4	617
	Harris, W. A. (See Babbitt, G. R., assignor.) .....	.....	.....	.....	4	617
136, 597	Harris, W. A., Providence, R. I. Drip-collecting device	Mar. 11, 1873	233	79	3	273
	Harris, W. S., et al. (See Sinclair, J. D., assignor)	(Reissue.) ..	.....	.....	3	273
146, 069	Harris, W. S., Trenton, N. J. Portable cradle	Dec. 30, 1873	950	307	4	709
6, 658	Harrison, B. J., New York, N. Y. Chair-frame	May 20, 1873	.....	.....	3	559
141, 271	Same. Folding chair	July 29, 1873	875	286	4	115
	Harrison, C. (See Clark, M. S., assignor.) .....	.....	.....	.....	4	115
138, 151	Harrison, J., jr., Philadelphia, Pa. Steam-boiler	(Extension) ..	.....	.....	4	353
139, 147	Harrison, J., East Hampton, Conn. Door-bell	Apr. 22, 1873	799	253	3	456
141, 139	Same. Bell-ringing	May 20, 1873	623	195	3	571
141, 788	Same. Furnace for melting metals	July 22, 1873	732	243	4	96
143, 147	Harrison, J., New York, N. Y. Sign	Aug. 12, 1873	349	115	4	171
143, 758	Harrison, J. D., Middletown, Ohio. Wheel-plow	Sept. 23, 1873	721	248	4	323
144, 336	Harrison, J. W., Niles, Mich. Dumping-platform for railway-cars	Oct. 21, 1873	354	118	4	427
	Harrison, R. J., assignor of one-half interest to J. Q. Williams, Raleigh, N. C. Wash-boiler	Nov. 4, 1873	135	45	4	489
	Harrison, T. J. (See Perkins, S. R., assignor.) .....	.....	.....	.....	4	489
136, 993	Harrison, W., Chicago, Ill. Apparatus for shearing horses	Mar. 18, 1873	574	191	3	310
139, 787	Harrison, W., assignor of one-half interest to H. C. Prewitt, Linneus, Mo. Harvester	June 10, 1873	327	102	3	651
138, 248	Harsch, G., Chicago, Ill. Tuyere	Apr. 29, 1873	915	289	3	473
144, 538	Harsen, W., Green Point, N. Y. Steering-propeller	Nov. 11, 1873	317	108	4	515
	Hart, B. E. (See Shively, T., assignor.) .....	.....	.....	.....	4	515
	Hart, Bliven & Mead Manufacturing Co. (See Fogelstrand, O. F., assignor ... (Design.) ..				4	515

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 566	Hart, Bliven & Mead Manufacturing Company. (See Jones, H. K., assignor). (Reissue.)	Dec. 16, 1873	483	158	4	648
143, 148	Hart, G. B., Tarrytown, N. Y. Machine for removing snow from roadways	Sept. 23, 1873	722	248	4	333
	Hart, G. B., Buffalo Township, Iowa. Shoe fastening					
	Hart, G. E. (See Logan & Hart.)					
	Hart, H. B. (See Marchant & Hart.)					
144, 092	Hart, H. C., Unionville, Conn. Saw-set	Oct. 28, 1873	662	218	4	463
144, 673	Hart, I., Cincinnati, Ohio. Inking apparatus	Nov. 18, 1873	437	148	4	537
	Hart, J., et al. (See Picking & Hopkins, assignors.)					
137, 839	Hart, J., Kekoskee, Wis. Coffee-roaster	Apr. 15, 1873	519	162	3	423
146, 070	Hart, J., assignor to S. H. Jenkins, N. B. Brown, and J. C. Belden, Philadelphia, Pa. Spoon	Dec. 30, 1873	951	307	4	709
135, 708	Hart, R. B., Salado, Tex. Wash-boiler attachment	Feb. 11, 1873	303	96	3	163
144, 452	Hart, S., Fulton, N. Y. Grain-drill	Nov. 11, 1873	243	82	4	510
142, 017	Hart, W., Philadelphia, Pa. Self braking, lowering, and hoisting apparatus	Aug. 19, 1873	556	184	4	197
	Hart, W. D., et al. (See Bristol, H. C., assignor.)					
139, 464	Hart, W. H., New Britain, Conn. Sheet-metal hinge	June 3, 1873	19	6	3	610
143, 283	Hart, W. H., Lowell, Mass., assignor of one-half interest to A. Colburn, Nashua, N. H. Lounge	Sept. 30, 1873	842	290	4	359
	Hartford Carpet Company. (See Fisher, J., assignor). (Design.)					
	Same. (See Heinigke, O., assignor). (Design.)					
	Same. (See Horan, H., assignor). (Design.)					
	Same. (See Malkin, L. G., assignor). (Design.)					
	Same. (See Ney, E. J., assignor). (Design.)					
	Same. (See Nordman, H., assignor). (Design.)					
	Same. (See Smith, J. H., assignor). (Design.)					
	Hartford Eyelet Company. (See Sandfear, W. R., assignor). (Reissue.)					
143, 238	Harting, C., Washington, D. C. Carpet-fastener	Sept. 30, 1873	806	277	4	356
	Hartley, W. H. (See Borton & Hartley.)					
143, 572	Hartley, W. H., Philadelphia, Pa. Horse hay-rake	Oct. 14, 1873	164	55	4	402
135, 221	Hartman, B. F., Charlestown, Pa. Sash-balance	Jan. 28, 1873	682	220	3	263
137, 365	Hartman, J., jr., Philadelphia, Pa. Screw-propeller	Apr. 1, 1873	79	26	3	363
145, 651	Hartman, J. J., Saint Louis, Mo. Adjustable reclining-chair	Dec. 16, 1873	553	182	4	654
141, 002	Hartman, J. M., assignor to Taws & Hartman, Philadelphia, Pa. Metallurgic gas-furnace	July 22, 1873	611	206	4	86
134, 800	Hartman, S. B., Lancaster, Pa. Wash-boiler attachment	Jan. 14, 1873	283	92	3	43
136, 373	Hartmann, F., Chicago, Ill. Street-lamp	Mar. 4, 1873	21	7	3	247
137, 918	Harts, P. N., French Grove, Ill. Corn-husking glove	Apr. 15, 1873	583	183	3	429
5, 558	Hartshorn, S., New York, N. Y. Shade fixture. (Reissue.)	Sept. 2, 1873	201	65	4	258
137, 677	Hartzell, G., Philadelphia, Pa. Bed-lounge	Apr. 8, 1873	364	113	3	398
143, 284	Hartzell, H. H., Holden, Mo. Harness trace-buckle	Sept. 30, 1873	843	290	4	359
	Hartzell, J. D. (See Brooks & Hartzell.)					
138, 802	Hartzell, J. D., Ozawkie, Kans. Washing-machine	May 13, 1873	309	95	3	533
134, 801	Harvey, C. W., Buffalo, N. Y. Railway-car axle-box	Jan. 14, 1873	284	92	3	43
139, 148	Harvey, J., assignor to self and M. Ford, Philadelphia, Pa., and W. Harvey, New York, N. Y. Machine for bending pipe-stems	May 20, 1873	624	195	3	571
136, 321	Harvey, J. T., Murrysville, Pa. Grinding-mill	Feb. 25, 1873	857	276	3	232
140, 918	Harvey, P., assignor to N. C. Gridley, Chicago, Ill. Water-supply valve	July 15, 1873	515	173	4	69
	Harvey, W., et al. (See Harvey, J., assignor.)					
6, 875	Harway, J. W. (See Hodges, J. W., assignor.)					
	Harwood, G. W., Troy, and R. Wood, assignors to the Henry I. Seymour Chair Manufactory, West Troy, N. Y. Chair. (Design.)	Sept. 9, 1873			4	270
	Harwood, G. S., et al. (See Morrison, C. F., assignor.)					
6, 868	Harwood, W. A., Brooklyn, N. Y., assignor to the Merriam Manufacturing Company, Durham, Conn. Toy rail-car. (Design.)	Sept. 2, 1873			4	241
144, 026	Harwood, W. A., Brooklyn, N. Y. Toy horn	Oct. 28, 1873	607	201	4	458
138, 329	Hasbrook, F., Stokes' Mound, Mo. Wheel-plow	Apr. 29, 1873	992	312	3	479
144, 453	Same. same.	Nov. 11, 1873	244	82	4	510
	Haseltine, J. (See Snow & Haseltine.)					
138, 022	Haskell, E., Dover, N. H. Folding book-case	Apr. 22, 1873	689	218	3	447
	Haskell, H. M., et al. (See Root, J. B., assignor). (Reissue.)					
136, 374	Haskell, J. E., Baltimore, Md. Dovetailing-machine	Mar. 4, 1873	21	7	3	247
	Haskell, W. H. (See Tingley, C. B. F., assignor). (Reissue.)					
143, 239	Haskins, C. C., New Albany, Ind., assignor of one-half interest to J. Ferrier, Louisville, Ky. Earth-closet	Sept. 30, 1873	806	277	4	356
136, 241	Haskins, J. F., Fitchburgh, Mass. Vapor-engine	Feb. 25, 1873	785	254	3	227
137, 200	Same. same.	Mar. 25, 1873	775	256	3	336
137, 441	Same. Crank-shaft eccentric	Apr. 1, 1873	145	47	3	369
145, 175	Same. Boiler for vaporizing volatile fluids	Dec. 2, 1873	128	42	4	595
146, 000	Same. Sewing-machine attachment for making button-holes	Dec. 30, 1873	889	{ 288 } { 289 }	4	704
135, 427	Hastings, E. B., Palmer, and W. E. Nichols and W. L. Merritt, Templeton, Mass., said Hastings and Nichols assignors to said Merritt. Looms for weaving slats, window-shades, &c.	Feb. 4, 1873	32	9	3	130
135, 428	Hastings, E. B., Palmer, and J. Desper, Barre, Mass. Hat-pressing machine	Feb. 4, 1873	33	10	3	130
139, 312	Hastings, G. S., jr., assignor to self and E. N. Pierce, Plainville, Conn. Envelope-opener	Dec. 23, 1873	786	250	3	592
145, 798	Hastings, G. S., assignor of two-thirds interest to C. B. Stephens and E. N. Pierce, Plainville, Conn. Toy pistol or gun	May 27, 1873	692	227	4	678
146, 001	Hastings, R. E., Philadelphia, Pa. Manufacture of gold-leaf for bookbinders' use	Dec. 30, 1873	890		4	704
	Hatch, B. W. (See Raynard and Hatch, B. W. and W. P.)					
137, 303	Hatch, G. W., assignor to Lyon and Fellows Manufacturing Company, Brooklyn, N. Y. Gas-burner	Apr. 1, 1873	21	7	3	359
142, 102	Hatch, H., Jefferson, Me. Reciprocating churn	Aug. 26, 1873	655	215	4	215
	Hatch, W. P. (See Raynard and Hatch, B. W. and W. P.)					
143, 759	Hatfield, A. L., Clyde, Ohio. Pump	Oct. 21, 1873	355	118	4	427
140, 701	Hatfield, G. W., assignor to self and Dixie Oil Company, Nashville, Tenn. Saponifying apparatus	July 8, 1873	320	108	4	46
143, 240	Hatfull, R., Deptford, England, assignor to D. L. Evans, New York, N. Y. Composition for preventing incrustations in steam-boilers	Sept. 30, 1873	807		4	356
134, 883	Hathaway, A., Freetown, Mass. Paper-ruling machine	Jan. 14, 1873	358	114	3	49
143, 693	Same. Base-burning stove	Oct. 14, 1873	274	90, 91	4	411
	Hathaway, M. D., et al. (See Moore, S., assignor.)					
	Hatlinger, J. J. (See Miller, W., assignor.)					
	Haughey, M. (See Craig & Haughey.)					
	Haun, A. H. (See Kernodle & Haun.)				3	671
43, 624	Havasy, L., Hoboken, N. J. Child's carriage	Oct. 14, 1873	210	71	4	406

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137, 678	Havell, G., assignor to Stevens, Roberts & Havell, Newark, N. J. Skate heel-plates	Apr. 8, 1873	365	113	3	398
136, 598	Haven, E. W., Brandon, Vt. Knife-scourer	Mar. 11, 1873	234	79	3	273
140, 624	Havens, A. F., Brooklyn, N. Y. Apparatus for charging gas-retorts	July 8, 1873	257	87	4	40
142, 849	Haver, W. W., assignor to self, J. Atwell, Schuyler, and W. Gates, Frankfort, N. Y. Car-coupling	Sept. 16, 1873	473	161	4	303
138, 249	Haverstick, L., Manor Township, Pa. Horse hay-fork	Apr. 29, 1873	916	289	3	473
144, 846	Same. Cultivator	Nov. 25, 1873	597	203	4	560
	Hawes, C. L. (See Whealen, C., assignor.)					
	Hawes, L. P., et al. (See Clough, T., assignor.)					
	Hawes, L. P. (See Maxim & Hawes.)					
134, 884	Hawkins, F. A., Noblesville, Ind. Hand corn-planter	Jan. 14, 1873	359	114	3	49
136, 322	Hawkins, G. C., Boston, Mass. Machine for burnishing the soles of boots and shoes	Feb. 25, 1873	858	276	3	232
145, 501	Hawkins, G. C., Boston, Mass., assignor to The Shoe Machine Manufacturing Company, New Haven, Conn. Machine for buffing boots and shoes	Dec. 16, 1873	418	137	4	643
145, 943	Hawkins, G. C., assignor to Morris & Ireland, Boston, Mass. Machine for burnishing heels, &c.	Dec. 30, 1873	842	274	4	700
144, 763	Hawkins, J. V., Clayton, Mich. Paper-holder shelf	Nov. 18, 1873	514	174	4	543
140, 919	Hawkins, J. F., Hannibal, Mo. Milk-cooler	July 15, 1873	516	173	4	69
137, 136	Hawkins, J. T., assignor of one-half interest to G. R. Holt, Salisbury, Vt. Machine for making spool-blanks	Mar. 25, 1873	712	{ 236 } { 237 }	{ 3 }	{ 332 }
143, 073	Hawkins, J. T., Salisbury, Vt. Tool for making button-molds	Sept. 23, 1873	666	229	4	329
	Hawkins, L. D. (See Webster, J. and J. H., assignors.)					
135, 911	Hawkins, L. P., assignor to N. Coombs, Lynn, Mass. Heel nailing and shaving machine ..	Feb. 18, 1873	492	159	3	192
137, 304	Hawkins, L. P., assignor to W. F. Morgan and B. Dore, Lynn, Mass. Machinery for finishing the heels of boots and shoes	Apr. 1, 1873	22	7	3	359
141, 712	Hawkins, L. P., assignor to Morgan & Dore, Lynn, Mass. Machinery for finishing the heels of boots and shoes	Aug. 12, 1873	277	91	4	165
140, 037	Hawkins, S., Chillicothe, Mo. Washing-machine	June 17, 1873	550	{ 173 } { 174 }	{ 3 }	{ 677 }
140, 625	Hawks, M. L., Kinderhook, Mich. Washing-machine	July 8, 1873	258	87	4	41
145, 799	Same. same	Dec. 23, 1873	693	227	4	678
136, 509	Hawley, B. R., Normal, Ill. Furnace and furnace-door	Mar. 4, 1873	136	44, 45	3	256
136, 510	Same. Furnace and steam-generator for heating, &c.	Mar. 4, 1873	137	45	3	256
140, 367	Hawley, H. Q., Albany, N. Y. Rotary fluid-motor	July 1, 1873	26	9	4	10
135, 709	Hawley, J. M., Alma, Ill. Hand corn-sheller	Feb. 11, 1873	304	96	3	164
143, 901	Hawley, S. F., assignor to self and J. M. Whitmon, Sandy Hill, N. Y. Clothes-pounder ..	Oct. 21, 1873	475	160	4	437
134, 747	Haworth, G. D., Decatur, Ill. Corn-planter	Jan. 14, 1873	239	77	3	40
	Haworth, J., et al. (See Schofield, J., assignor.)					
134, 885	Haws, A. I., Johnstown, Pa., and J. A. Vaughn, Cuyahoga Falls, said Vaughn assignor to said Haws. Apparatus for making tuyeres for Bessemer converters	Jan. 14, 1873	360	115	3	49
137, 548	Hawson, S., Jersey City, N. J., and T. Sweeney, Brooklyn, N. Y. Inkstand	Apr. 8, 1873	252	77	3	389
141, 505	Hawthorn, W. A., and E. E. Scott, Carson City, Nev. Window-fastener	Aug. 5, 1873	85	26	4	142
	Hay & Co. (See Gaskill, H. C., assignor.)					
140, 196	Hay, A. T., Burlington, Iowa. Electrical protection for boilers	June 24, 1873	708	223	3	697
	Hay, G. R., Cleveland, Ohio. Machine for cutting out wooden ware	Aug. 9, 1873			4	134
	Hay, S. F. (See Goodchild & Hay.)					
137, 442	Haycock, S. H., Ottawa, Canada. Projectile	Apr. 1, 1873	146	47	3	369
139, 577	Hayden, C. M., Hanover, assignor to self and Z. M. Lane, East Abington, Mass. Sole-pressing machine	June 3, 1873	114	38	3	618
	Hayden, H. W., Waterbury, Conn. Machine for making kettles	Mar. 8, 1873			3	271
	Same. Brass kettle	Mar. 8, 1873			3	272
6, 595	Hayden, N., Essex, Conn. Coffin-handle	Apr. 22, 1873			3	444
	Hayes, E. B., et al. (See Flanders, J. P., assignor.)					
5, 650	Hayes, G., New York, N. Y. Skylight	Nov. 11, 1873	363	123	4	519
5, 693	Same. same	Dec. 23, 1873	805	264	4	686
139, 672	Hayes, G., Lawrenceburgh, Ind. Corn-planter	June 10, 1873	214	69	3	642
143, 149	Hayes, G., New York, N. Y. Skylight	Sept. 23, 1873	723	249	4	333
143, 150	Same. same	Sept. 23, 1873	724	249	4	333
143, 151	Same. same	Sept. 23, 1873	724	249	4	334
143, 152	Same. Skylight-cover	Sept. 23, 1873	725	249	4	334
143, 153	Same. Skylight-turret and conservatory	Sept. 23, 1873	725	250	4	334
144, 539	Hayes, G. E., assignor to Buffalo Dental Manufacturing Company, Buffalo, N. Y. Rack for dental tools	Nov. 11, 1873	318	108	4	515
136, 375	Hayes, J. R., Washington, D. C., assignor of two-thirds interest to F. C. Hooton and J. Rutter, West Chester, Pa. Manufacture of fuel from coal-waste	Mar. 4, 1873	23		3	247
138, 562	Hayes, J. V., Buffalo, N. Y. Hydrant	May 6, 1873	86	27	3	504
135, 644	Haynes, C. E., Boston, assignor to self and I. Gardner, 2d, Hingham, Mass. Tool for cutting pipes	Feb. 11, 1873	246	77, 78	3	159
138, 803	Haynes, C. E., assignor to self and W. H. Henderson, Boston, Mass. Clothes wringer ..	May 13, 1873	309	96	3	533
	Haynes, E. (See Robins, W. B., assignor.)					
136, 994	Haynes, E. K., Boston, Mass. Lantern	Mar. 18, 1873	575	192	3	310
144, 200	Same. same	Nov. 4, 1873	26	7	4	480
	Haynes, H. (See Robins, W. B., assignor.)					
	Haynes, J., Hollis, Me. Wood-saw frame	Aug. 9, 1873			4	108
6, 974	Haynes, W. A., Everett, assignor to self and S. Badger, Charlestown, Mass. Match-safe	Nov. 4, 1873			4	478
5, 451	Hays, C., Waukesha, Wis., assignor to Kip Manufacturing Company. Step-ladder. (Re-issue)	June 17, 1873	619	195	3	682
137, 919	Hays, M., Binghamton, N. Y. Nut-lock	Apr. 15, 1873	584	184	3	429
142, 161	Hayward, D. E., Malden, Mass. Rubber sole for boots and shoes	Aug. 26, 1873	704	232	4	219
6, 509	Hayward, S., Boston, Mass., assignor to J. Estey & Co., Brattleborough, Vt. Organ-case	Mar. 18, 1873			3	297
6, 510	Same. Organ-case	Mar. 18, 1873			3	297
6, 511	Same. same	Mar. 18, 1873			3	297
6, 679	Same. same	May 27, 1873			3	586
6, 680	Same. Ends of an organ-case	May 27, 1873			3	586
6, 828	Same. Chair	Aug. 26, 1873			4	212
143, 823	Hazard, A. P., North Bridgewater, Mass. Implement for edge-trimming soles	Oct. 21, 1873	408	136	4	431
	Hazard, T. H. (See Moris, H. C., assignor.)					
145, 298	Hazelip, J. N., Baltimore, Md. Child's carriage	Dec. 9, 1873	237	80	4	617
	Hazeltine, D. W. (See Cummings, G. W., assignor.)					
137, 920	Hazeltine, E. T., and C. Park, assignors to R. D. Hazeltine, Warren, Pa. Clamp for paper-cutting machines	Apr. 15, 1873	584	184	3	429
	Hazeltine, R. D., (See Hazeltine & Park, assignors.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 573	Hazlett, H. K., Saint Louis, Mo. Bung.....	Oct. 14, 1873	165	55	4	402
	Head, J. (See Schemioth, C., assignor.)					
6, 355	Heald, A., assignor to McCallum, Crease & Sloan, Philadelphia, Pa. Carpet... (Design)...	Jan. 21, 1873			3	70
6, 356	Same.....	Jan. 21, 1873			3	70
6, 588	Same.....	Apr. 15, 1873			3	417
6, 653	Same.....	May 20, 1873			3	558
6, 554	Same.....	May 20, 1873			3	558
6, 713	Same.....	June 24, 1873			3	691
6, 714	Same.....	June 24, 1873			3	691
6, 715	Same.....	June 24, 1873			3	691
6, 716	Same.....	June 24, 1873			3	691
6, 717	Same.....	June 24, 1873			3	691
6, 718	Same.....	June 24, 1873			3	691
6, 719	Same.....	June 24, 1873			3	691
6, 720	Same.....	June 24, 1873			3	691
	Heald, W. D., et al. (See Grandy, C. E., assignor.)					
6, 411	Heald, W. D. (See Grandy, Z. B. & C. E., assignors.)					
139, 890	Healey, J. I., Brooklyn, N. Y. Fence..... (Design)...	Feb. 11, 1873			3	157
	Same..... Hydrant and fire-plug.....	June 17, 1873	426	133	3	666
139, 005	Healy, B. S., Cohocton, N. Y. Self-acting brake..... (Extension)...	Aug. 16, 1873			4	158
	Healy, P. H., assignor of one-half interest to W. H. Bryant, Chicago, Ill. Machine for forming railway coupling-links.....	May 20, 1873	493	155	3	561
137, 679	Hearne, J. C., and D. Adams, Pleasant Hill, Mo. Extensible ladder.....	Apr. 8, 1873	365	113	3	398
138, 886	Heath, E., San Francisco, Cal. Work-box.....	May 13, 1873	383	120	3	539
138, 887	Heath, J. S., London, England. Breech-loading fire-arm.....	May 13, 1873	383	120	3	539
	Heath, M. (See Piper, R. U., assignor.)					
139, 788	Heatherington, R. (See Hipkins, S. jr., assignor.)					
137, 305	Heatley, J., Harrisburgh, Pa. Puddling-furnace.....	June 10, 1873	328	102	3	651
145, 417	Heaton, D., Providence, R. I. Lacing-stud.....	Apr. 1, 1873	23	7	3	359
136, 995	Hebard, A. K., Cambridge, Mass. Piano-forte action.....	Dec. 9, 1873	340	114	4	625
134, 600	Hebb, T., Great Mills, Md. Rat-trap.....	Mar. 18, 1873	577	192	3	310
144, 093	Hebbard, A., New York. Stopper for volatile-salts bottles.....	Jan. 7, 1873	98	31	3	15
	Heberling, J., Mount Pleasant, Ohio, assignor of one-half interest to C. L. McCoy, Wheeling, W. Va. Whip-socket.....	Oct. 28, 1873	663	218	4	463
136, 435	Heckenbach, J. A., Mayville, Wis. Metronome.....	Mar. 4, 1873	71	25	3	251
140, 038	Heckenbach, J. A., and A. Haertle, Mayville, Wis. Last-block fastening.....	June 17, 1873	551	174	3	677
137, 549	Hedenburg, J. W., Chicago, Ill. Bale-tie.....	Apr. 8, 1873	253	78	3	389
	Hedges, H. C., et al. (See Essick, S. V., assignor.)					
	Hedges, I. A., Saint Louis, Mo. Mill for grinding cane, &c..... (Extension)...	Feb. 1, 1873			3	70
	Hedges, L. E., et al. (See Lindsley, W. D., assignor.)					
136, 160	Hedley, W., Medina, N. Y. Composition for artificial stone.....	Feb. 25, 1873	723		3	222
134, 542	Heegler, G., San Francisco, Cal. Hanging door.....	Jan. 7, 1873	36	12	3	10
141, 347	Heer, D., assignor to H. D. Hirst, Philadelphia, Pa. Lathe.....	July 29, 1873	948	308	4	121
141, 789	Heermans, T., Mattoon, Ill. Coffee-roaster.....	Aug. 12, 1873	349	115	4	171
138, 399	Heffley, W. H., assignor of one-half interest to C. A. Mitchell, Rochester, Ind. Quilting-attachment for sewing-machines.....	Apr. 29, 1873	1,047	330	3	484
138, 152	Heffron, C. M., Rochester, N. Y. Combined rule, square, and bevel.....	Apr. 22, 1873	800	255	3	456
141, 929	Hegeler, E. C., and F. W. Matthiessen, La Salle, Ill. Sheet-metal roofing.....	Aug. 19, 1873	433	160	4	191
144, 904	Same..... Furnace for desulphurizing ores.....	Nov. 25, 1873	640	218	4	564
134, 543	Heidt, A. P., assignor to self and J. H. Hubbell, New York, N. Y. Automatic fan.....	Jan. 7, 1873	37	12	3	10
134, 665	Heiges, J. M., York, Pa. Cultivator.....	Jan. 7, 1873	158	52	3	19
144, 094	Hailes, F., New York, N. Y. Fastening for pocket-books.....	Oct. 28, 1873	664	219	4	463
138, 888	Heim, G. M., Brownsville, Ind. Reciprocating churn.....	May 13, 1873	384	120	3	539
	Heim, J. (See Keller, P., assignor.)					
6, 771	Heimbach, B. F., Allentown, Pa. Burial-casket..... (Design)...	July 15, 1873			4	57
6, 772	Same..... Burial-case..... (Design)...	July 15, 1873			4	57
	Heine, A., et al. (See Huntley, W. W., assignor.)					
143, 241	Heinig, F. E., Louisville, Ky. Dinner-bucket.....	Sept. 30, 1873	808	277	4	356
6, 416	Heinigke, O., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet..... (Design)...	Feb. 18, 1873			3	189
6, 417	Same.....	Feb. 18, 1873			3	189
6, 418	Same.....	Feb. 18, 1873			3	189
6, 419	Same.....	Feb. 18, 1873			3	189
6, 420	Same.....	Feb. 18, 1873			3	189
6, 421	Same.....	Feb. 18, 1873			3	189
6, 422	Same.....	Feb. 18, 1873			3	189
6, 423	Same.....	Feb. 18, 1873			3	189
6, 424	Same.....	Feb. 18, 1873			3	189
6, 513	Same.....	Mar. 25, 1873			3	325
6, 514	Same.....	Mar. 25, 1873			3	325
6, 515	Same.....	Mar. 25, 1873			3	325
6, 516	Same.....	Mar. 25, 1873			3	325
6, 517	Same.....	Mar. 25, 1873			3	325
6, 625	Same.....	May 6, 1873			3	497
6, 909	Same.....	Oct. 7, 1873			4	380
6, 910	Same.....	Oct. 7, 1873			4	380
6, 911	Same.....	Oct. 7, 1873			4	380
6, 912	Same.....	Oct. 7, 1873			4	380
6, 913	Same.....	Oct. 7, 1873			4	380
6, 914	Same.....	Oct. 7, 1873			4	380
6, 915	Same.....	Oct. 7, 1873			4	380
6, 916	Same.....	Oct. 7, 1873			4	380
6, 917	Same.....	Oct. 7, 1873			4	380
6, 918	Same.....	Oct. 7, 1873			4	380
6, 919	Same.....	Oct. 7, 1873			4	380
6, 920	Same.....	Oct. 7, 1873			4	380
6, 921	Same.....	Oct. 7, 1873			4	380
6, 922	Same.....	Oct. 7, 1873			4	380
6, 923	Same.....	Oct. 7, 1873			4	380
6, 924	Same.....	Oct. 7, 1873			4	380
6, 925	Same.....	Oct. 7, 1873			4	380
6, 926	Same.....	Oct. 7, 1873			4	380
6, 927	Same.....	Oct. 7, 1873			4	380
6, 928	Same.....	Oct. 7, 1873			4	380
6, 929	Same.....	Oct. 7, 1873			4	380

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6, 930	Heinigke, O., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet..... (Design)	Oct. 7, 1873			4	380
6, 931	Same..... same..... (Design)	Oct. 7, 1873			4	380
7, 051	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 052	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 053	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 054	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 055	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 056	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 057	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 058	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 059	Same..... same..... (Design)	Dec. 16, 1873			4	641
143, 902	Heinisch, R., Newark, N. J. Tailors' shears..... (Extension)	Sept. 20, 1873			4	296
144, 540	Heins, L., Brunswick, Ga. Treadle.....	Oct. 21, 1873	476	160	4	437
144, 095	Heisler, C., Saint Louis, Mo. Electrical water-gage, alarm, and register.....	Nov. 11, 1873	319	108	4	515
	Heissenbittel, W., Brooklyn, N. Y. Foot-warmer.....	Oct. 28, 1873	664	219	4	463
	Heister, T. S. (See Vedder & Heister)..... (Design)					
	Same..... (See Vedder, Ritchie & Heister)..... (Design)					
143, 410	Heitkamp, L., New York, N. Y. Press for holding books.....	Oct. 7, 1873	11	4	4	381
134, 886	Held, C. W., jr., and A. M. Bangh, Brooklyn, N. Y. Pedal attachment for pianos.....	Jan. 14, 1873	361	115	3	49
138, 330	Helfrich, D. W., Corry, Pa. Washing-machine.....	Apr. 29, 1873	993	312	3	479
138, 023	Heller, D. C., Reading, Pa. Composition pavement.....	Apr. 22, 1873	689	218	3	447
	Helm, A. (See Helm, J. and A.).....					
138, 085	Helm, J., assignor to self and C. Timm, Hochheim, Tex. Cultivator.....	Apr. 22, 1873	749	237	3	452
139, 062	Same..... Cotton-worm destroyer.....	May 20, 1873	542	171	3	565
144, 615	Helm, J. and A., Washington, D. C. Match-safe.....	Nov. 18, 1873	390	131	4	533
143, 010	Helm, J. H., Pittsburgh, Pa. Machine for bending truck sides for railway-cars.....	Sept. 23, 1873	613	{ 208 } 209	{ 4 }	324
	Helmer, A. M. (See Foote, A. D., assignor.).....					
5, 424	Helms, C. H., Poughkeepsie, N. Y., assignor by mesne assignment to J. W. Brooks, trustee. Machinery for trimming the heels of boots and shoes..... (Reissue)	May 27, 1873	905	292	3	602
	Helwig, C. D. (See Myers, D. B., assignor.).....					
135, 804	Hemenway, C. F., assignor of two-thirds interest to J. H. B. Beattie and A. A. Powers, New London, Ohio. Cloth-measure.....	Feb. 11, 1873	391	126	3	170
136, 242	Hemenway, S. W., Lansing, Iowa. Railway-train indicator.....	Feb. 25, 1873	786	254	3	227
139, 006	Same..... Auger-handle.....	May 20, 1873	494	156	3	561
145, 800	Hempel, H. A., Saint Joseph, Mo. Printers' furniture.....	Mar. 18, 1873	693	227	4	678
136, 996	Hempell, G. W., Millville, N. J. Fruit-jar.....	Dec. 23, 1873	578	192	3	310
143, 074	Hempstead, B., Little Rock, Ark. Cotton-gin.....	Sept. 23, 1873	667	229	4	329
	Henckley and Egery Iron Company. (See Howard, O. S., assignor.).....					
6, 540	Hendberg, M., Boston, Mass. Jewelry case..... (Design)	Apr. 1, 1873			3	356
	Henderson, J. M., et al. (See Smith, J. H., assignor.).....					
139, 245	Henderson, T., and W. G. Wright, Hamilton, Canada. Sewing-machine.....	May 27, 1873	727	{ 229 } 230	{ 3 }	587
145, 103	Henderson, T. M., and F. L. McDonald, Omaha, Nebr. Machine for facing cylinders.....	Dec. 2, 1873	59	19	4	590
	Henderson, W. H. (See Haynes, C. E., assignor.).....					
141, 790	Henderson, W. M., Philadelphia, Pa. Hydraulic railroad-car brake.....	Aug. 12, 1873	351	115	4	171
143, 980	Same..... Hydraulic or air-car brake.....	Oct. 28, 1873	565	187	4	454
135, 334	Hendricks, N., Jersey City, N. J. Telegraph-insulator.....	Jan. 28, 1873	786	254	3	111
137, 366	Hendrickson, D. W., Red Bank, N. J. Blast-furnace.....	Apr. 1, 1873	80	26	3	363
139, 891	Same..... Blast and cupola furnace.....	June 17, 1873	427	133	3	666
140, 134	Hendrickson, E. M., Brooklyn, N. Y. Burglar-alarm.....	June 24, 1873	655	206	3	693
	Hendrickson, S. C., et al. (See Pope, F. L., assignor.)..... (Reissue)					
143, 694	Hendrickson, S. C., Brooklyn, N. Y. Electric railway-signal.....	Oct. 14, 1873	275	91	4	411
143, 903	Same..... Track-circuit for electric railway-signals.....	Oct. 21, 1873	476	160	4	437
	Hendy, J., San Francisco, Cal. Double-friction coupling..... (Extension)	Oct. 11, 1873			4	379
5, 335	Same..... same..... (Reissue)	Mar. 25, 1873	846	277	3	342
140, 414	Same..... Engine-governor.....	July 1, 1873	62	22	4	13
136, 511	Heneage, R., Buffalo, N. Y. Ozone-generator.....	Mar. 4, 1873	139	45	3	257
136, 512	Same..... same.....	Mar. 4, 1873	141	46	3	257
140, 702	Henegan, E. E., Downsville, Wis. Bee-hive.....	July 8, 1873	321	109	4	46
143, 450	Same..... Corn-planter.....	Oct. 7, 1873	46	16	4	384
139, 465	Henika, H., and M. F. Carder, Kalamazoo, Mich. Burial-casket.....	June 3, 1873	19	6	3	610
134, 666	Henis, C. F., Baltimore, Md. Saw-swaging device.....	Jan. 7, 1873	159	52	3	19
134, 667	Same..... Saw-swaging machine.....	Jan. 7, 1873	160	53	3	19
139, 149	Same..... Saw-filing machine.....	May 20, 1873	625	195	3	571
140, 501	Hennaman, J. T., Baltimore, Md. Cigar-machine.....	July 1, 1873	135	46	4	19
138, 086	Henning, R., assignor to self and J. D. Caton, Ottawa, Ill. Paper-file.....	Apr. 22, 1873	750	237	3	452
138, 889	Same..... Telegraph cut-out and switch.....	May 13, 1873	385	120	3	539
141, 437	Hennion, A. G., Buffalo, N. Y. Cemented slate-roofing.....	Aug. 5, 1873	24		4	137
134, 668	Henrichs, P., Erie, Pa. Baby's chair.....	Jan. 7, 1873	161	53	3	19
138, 804	Henry, A., Richmond, Ind. Balanced valve for steam-engines.....	May 13, 1873	310	96	3	533
145, 944	Henry, A., Edinburgh, Scotland. Breech-loading fire-arm.....	Dec. 30, 1873	844	274	4	700
	Henry, A. B. (See Kopping & Weideman, assignors.).....					
134, 669	Henry, C. J., Tunkhannock, Pa., and C. J. Wood, Brewerton, N. Y. Thread-cutter for sewing-machines.....	Jan. 7, 1873	162	53	3	19
138, 153	Henry, C. J., and C. J. Wood, Tunkhannock, Pa. Thread-cutter for sewing-machines.....	Apr. 22, 1873	801	255	3	456
	Henry, J. D. (See Skaats, W. W., assignor.).....					
137, 443	Henry, J. J., Baltimore, Md. Spindle-step.....	Apr. 1, 1873	147	48	3	369
	Henry, M. (See Henry, S. and M.).....					
145, 868	Henry, S. and M., Chenoa, Ill. Curtain-fixture.....	Dec. 23, 1873	752	245	4	682
142, 229	Hensgen, J., and E. Kruger, deceased, said Hensgen administrator to said Kruger. Carriage-window.....	Aug. 26, 1873	761	250	4	223
135, 805	Henson, F. W., Philadelphia, Pa. Washing-machine.....	Feb. 11, 1873	392	126	3	170
139, 150	Henszey, M., jr., Philadelphia, Pa. Pipe-coupling for railway-cars.....	May 20, 1873	626	195	3	571
	Henwood, E. (See Holman, J. F. L., assignor.).....					
141, 140	Herbig, T., Jasper, Ind. Stump-extractor.....	July 22, 1873	734	243	4	96
139, 466	Herboth, F., Newark, N. J. Device for traversing card and other cylinders.....	June 3, 1873	20	6	3	610
	Herchelrode, C. (See Hill, J. W., assignor.).....					
136, 513	Hering, H., Philadelphia, Pa. Fruit-jar.....	Mar. 4, 1873	143	46	3	237
	Hermann, I. (See Ball, G. M., assignor.).....					
134, 987	Herman, L., Detroit, Mich. Wrought-iron column.....	Jan. 21, 1873	460	147	3	72
137, 444	Hermance, J. F., assignor to H. P. Ostrom and A. C. Andrews, New Haven, Conn. Packing for piston-rods.....	Apr. 1, 1873	148	48	3	369

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5, 554	Hermance, R. M., assignor by mesne assignment to J. B. Wilkinson, Troy, N. Y. Cook- ing-stove..... (Reissue.)	Aug. 26, 1873	844	279 280	4	230
145, 567	Hermann, D., New York, assignor to C. H. Smith, Brooklyn, N. Y. Telegraph-transmitter	Dec. 16, 1873	484	158	4	648
	Hermann, H. O. (See Zwicker, O., assignor.)					
143, 695	Herold, C., Pittsburgh, Pa. Scrubbing-brush.....	Oct. 14, 1873	276	91	4	411
141, 557	Herr, A., Georgetown, D. C. Middlings-purifier.....	Aug. 5, 1873	127	49	4	145
	Herr, M. L. (See Iske, A., assignor.)					
6, 626	Herriet, J., assignor to D. W. Bruce, New York, N. Y. Type..... (Design)	May 6, 1873			3	497
6, 627	Same..... same..... (Design)	May 6, 1873			3	497
142, 628	Herriman, A. A., Greensborough, N. C. Turbine water-wheel.....	Sept. 9, 1873	277	91	4	276
135, 547	Herring, A. J., Mauch Chunk, Pa. Riding-stirrup.....	Feb. 4, 1873	143	46	3	139
145, 869	Same..... Stirrup.....	Dec. 23, 1873	753	245	4	682
138, 331	Herring, R. N., Chew's Landing, N. J. Ironing-board.....	Apr. 29, 1873	994	313	3	479
146, 002	Herriott, W. H., Brimfield, Ill. Portable elevator and dumper.....	Dec. 30, 1873	891	289	4	704
140, 415	Herrmann, A., New York, N. Y. Dress-protector.....	July 1, 1873	63	22	4	13
138, 154	Herron, A. C., assignor to self and D. Whittemore, Boston, Mass. Elevator.....	Apr. 22, 1873	803	256	3	456
	Herron, R. B. (See Snell, O., assignor.)					
136, 514	Herron, W. M., assignor to self and J. J. McDermott, Allegheny, Pa. Cigar-tip.....	Mar. 4, 1873	144	46	3	257
141, 051	Hersey, C. H., Boston, Mass. Hoisting-machine.....	July 22, 1873	651	219	4	90
135, 548	Hersey, T., Bangor, Me. Moccasin.....	Feb. 4, 1873	144	46	3	139
139, 151	Hershey, B., Erie, Pa. Chain-machine.....	May 20, 1873	626	196	3	571
145, 801	Hersome, C., Boston, Mass. Gaiter-boot.....	Dec. 23, 1873	694	227	4	678
	Hervé, C. F., et al. (See Hook, A. H., assignor.)					
	Hervé, C. F. (See Shaw & Tracy, assignors.)					
139, 892	Herveux, C., Islington, England. Tanning-apparatus.....	June 17, 1873	428	133	3	666
141, 141	Hervey, H. W. B., Philadelphia, Pa. Combined refrigerator and water-cooler.....	July 22, 1873	735	243	4	96
5, 234	Herzberg, A., assignor of one-half interest to I. Herzberg, Philadelphia, Pa. Umbrella- frame, runner, and notch..... (Reissue)	Jan. 14, 1873	435	138	3	54
140, 920	Herzberg, A. & I., Philadelphia, Pa. Manufacture of umbrella-notches.....	July 15, 1873	517	174	4	69
	Herzberg, I. (See Herzberg, A., assignor.)					
	Herzberg, I. (See Herzberg, A. & I.)					
136, 243	Herzog, A., New York, N. Y. Extension-table.....	Feb. 25, 1873	787	254	3	227
145, 652	Hess, J. W., assignor to self and J. B. Green, Montandon, Pa. Car-coupling.....	Dec. 16, 1873	554	182	4	654
	Heston, E. G. (See Fox & Heston.)					
141, 052	Heston, W., Akron, Ohio. Packing for piston-rods and valve-stems.....	July 22, 1873	652	220	4	90
139, 152	Hettinger A., assignor to G. W. Edwards and J. M. Patterson, Philadelphia, Pa. Cigar- trimmer.....	May 20, 1873	628	196	3	572
139, 673	Heublein, F. W., Hartford, Conn. Folding table.....	June 10, 1873	215	69	3	642
141, 713	Heughes, F. L., Rochester, N. Y. Feeder for printing-presses.....	Aug. 12, 1873	278	91	4	166
139, 506	Heulings, A., Philadelphia, Pa. Ice-creeper.....	June 3, 1873	55	18	3	613
135, 549	Hewet, H. W., assignor to H. Miller, Cincinnati, Ohio. Ticket-punch.....	Feb. 4, 1873	145	46	3	139
	Hewitt, C., Trenton, N. J. Machine for moving iron at the rolls..... (Extension)	June 7, 1873			3	608
141, 348	Hewitt, E. A., Groton, Conn. Rotary churn.....	July 29, 1873	949	308	4	121
	Hewitt, F. (See Harris & Hewitt.)					
	Hewitt, H. J. (See Braidwood & Hewitt.)					
	Hewitt, J. (See Madden & Dodsworth, assignors.)..... (Reissue)					
	Same..... (See Young, Hewitt & Mooney.)					
5, 302	Hewitt, J., Pittsburgh, Pa. Sad and fluting iron..... (Reissue)	Mar. 4, 1873	203	67	3	261
5, 357	Same..... Smoothing and fluting iron..... (Reissue)	Apr. 15, 1873	657	206	3	435
5, 358	Same..... Fluting-iron..... (Reissue)	Apr. 15, 1873	658	206	3	435
5, 437	Same..... Smoothing and fluting iron..... (Reissue)	June 3, 1873	186	60	3	624
134, 887	Hewitt, J., New York, N. Y. Sad-iron and crimping-shoe.....	Jan. 14, 1873	362	115	3	49
135, 116	Same..... Sad and fluting iron.....	Jan. 21, 1873	568	185	3	81
135, 335	Hewitt, J., Albany, N. Y. Smoothing and fluting iron and holder.....	Jan. 28, 1873	787	255	3	111
135, 550	Same..... Sad-iron crimper.....	Feb. 4, 1873	146	46	3	139
137, 201	Hewitt, J., Pittsburgh, Pa. Sad-iron.....	Mar. 25, 1873	776	256	3	337
137, 445	Same..... Sad and fluting iron.....	Apr. 1, 1873	148	48	3	369
145, 945	Hewitt, T. B., Williamstown, N. J., assignor of one-half interest to J. F. Bodine. Tool for holding glass bottles.....	Dec. 30, 1873	845	275	4	700
145, 418	Heyer, A., Philadelphia, Pa. Lounge.....	Dec. 9, 1873	341	114	4	625
145, 346	Heylman, M. H., Oshkosh, Wis. Water-wheel.....	Dec. 9, 1873	280	93	4	620
144, 027	Heymann, J., Boston, Mass. Desk-cover.....	Oct. 28, 1873	608	201	4	458
141, 714	Heyse, A., Terre Haute, Ind. Knob-latch.....	Aug. 12, 1873	279	91	4	166
	Heywood Brothers & Co. (See Heywood & Horton, assignors.)					
	Same..... (See Heywood, L., assignor.)					
	Same..... (See Howe, M. V., assignor.)..... (Reissue)					
	Same..... (See Teal, D. E., assignor.)..... (Reissue)					
134, 545	Heywood, L., assignor to Heywood Brothers & Co., Gardner, Mass. Chair.....	Jan. 7, 1873	38	12	3	10
134, 802	Heywood, L., assignor to self and E. T. Watkins, Gardner, Mass. Whip-stock.....	Jan. 14, 1873	286	93	3	43
135, 117	Heywood, L., assignor to Heywood Brothers & Co., Gardner, Mass. Cradle.....	Jan. 21, 1873	569	185	3	81
134, 544	Heywood, L., and E. E. Horton, assignors to Heywood Brothers & Co., Gardner, Mass. Chair-frame.....					
139, 387	Heywood, S. L., Minneapolis, Minn. Machine for dressing hoops.....	May 27, 1873	846	270 271	3	597
144, 096	Hiatt, N., Plum Hollow, Iowa. Eyelet for harness-traces.....	Oct. 28, 1873	665	219	4	463
145, 568	Hibbard, G. E., Fond du Lac, Wis. Heating air and supplying boilers therewith.....	Dec. 16, 1873	485	158 159	4	648
141, 349	Hibberd, G., Wheeling, W. Va. Ejector.....	July 29, 1873	950	309	4	121
146, 071	Hibbs, P., Knobnoster, Mo. Washing-machine.....	Dec. 30, 1873	951	307	4	709
145, 104	Hickman, E., Red Bluff, Cal. Gate.....	Dec. 2, 1873	60	19	4	590
136, 058	Hickman, F., Reading, Pa. Slate-cleaner.....	Feb. 18, 1873	615	202	3	202
145, 299	Same..... Harness-loop.....	Dec. 9, 1873	238	80	4	617
	Hickok, J. L. (See Terry C., assignor.)					
140, 272	Hickok, W. O., Harrisburgh, Pa. Ruling-pen.....	June 24, 1873	771	243	3	703
143, 625	Hicks, C. D., Bowling Green, Ohio. Refrigerator and cooler.....	Oct. 14, 1873	210	71	4	406
	Hicks, C. S. (See Palmberg, A. J., assignor.)					
134, 803	Hicks, J. M., Summit, N. J. Tubular steam-generator.....	Jan. 14, 1873	286	93	3	43
143, 075	Hicks, J. S., Roslyn, N. Y. Indexing-book.....	Sept. 23, 1873	668	230	4	329
137, 840	Hicks, O. H., Baltimore, Md. Manufacturing matches.....	Apr. 15, 1873	520		3	423
	Hicks, W. C., New York, N. Y. Sewing-machine..... (Extension)	Apr. 12, 1873			3	356
5, 305	Hicks, W. C., Summit, N. J. Sewing-machine..... (Reissue)	Mar. 4, 1873	205	68	3	262
5, 564	Same..... breech-loading fire-arm..... (Reissue)	Sept. 9, 1873	387	130	4	285
143, 824	Same..... steam-pumping engine.....	Oct. 21, 1873	409	137	4	431
5, 384	Hicks, W. S., New York, N. Y. Pencil-case..... (Reissue)	Apr. 29, 1873	1, 115	352	3	489
	Hield, T. (See Goldthorp & Hield.)					

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			Spec.	Dr'g.	Vol.	Page.
142, 230	Hier, J. P. (See La Du, D., assignor.)					
137, 202	Hiers, J., assignor to self and J. J. Fox, West Manayunk, Pa. Car-coupling	Aug. 26, 1873	762	251	4	224
141, 220	Hiestand, D., Pughtown, Pa. Carriage-jack	Mar. 25, 1873	777	256	3	337
138, 155	Higbee, E. W., Northampton, Mass. Truss	July 29, 1873	826	270	4	111
142, 338	Higgin, J., Manchester, England. Dyeing with aniline black	Apr. 22, 1873	803		3	456
143, 760	Higgins, C. J., Indianapolis, Ind. Dissected map	Sept. 2, 1873	14	5	4	243
	Same.....School-desk	Oct. 21, 1873	355	118	4	427
	Higgins, E. (See Holtz, J., assignor.)					
	Higgins, F. (See Canis & Higgins.)					
134, 748	Higgins, J. B., Boston, Mass. Shawl-strap	Jan. 14, 1873	240	78	3	40
134, 607	Higgins, J. C. (See Brower & Higgins.)					
137, 367	Higgins, J. C., Millstone, N. J. Manger for horses	Jan. 7, 1873	98	31	3	15
139, 957	Higgins, L. J., Mount Desert, Me. Door-spring	Apr. 1, 1873	80	26	3	363
137, 368	Higgins, S., assignor of one-half interest of C. H. Bucknam, Portland, Me. Lounge and bedstead combined	June 17, 1873	480	151	3	670
140, 703	Higgins, W. C., North Blandford, Mass. Basket	Apr. 1, 1873	81	26	3	363
146, 072	Highfield, J., Centreville, Ind. Dumping-wagon	July 8, 1873	322	109	4	46
144, 616	Hight, H. A., sr., Fort Wayne, Ind. Spring bed-bottom	Dec. 30, 1873	952	307	4	709
5, 452	Highton, W., Malden, Mass. Hot-air register	Nov. 18, 1873	390	131	4	533
	Higley, A., Cleveland, Ohio, assignor to Higley Car-Journal Company. Car-truck.					
	(Reissue).....	June 17, 1873	620	195	3	682
5, 453	Same.....Car axle-box	June 17, 1873	621	195	3	682
	Higley Car-Journal Company. (See Higley, A., assignor.)					
	(Reissue).....					
	Hilderbrann, W. H. (See Sievers, F., assignor.)					
	Hildreth, H. A. (See Nourse, L. S., assignor.)					
	Hildreth, J. D., et al. (See Disney, M., assignor.)					
140, 135	Hildreth, R. S., Laurens, N. Y. Reading-gage	June 24, 1873	657	206	3	693
143, 904	Hilgenreiner, A., New York, N. Y. Registering attachment for printing-presses	Oct. 21, 1873	477	161	4	437
	Hill, A. B. (See McHarg & Hill.)					
	Same.....(See White, H. J., assignor.)					
	Hill, A. S., et al. (See Root, J. B., assignor.)					
134, 888	Hill, D. C., Windham, Conn. Guide for winding-machines	Jan. 14, 1873	362	115	3	49
144, 028	Hill, D. H., South Chester, Pa. Billiard-table leveler	Oct. 28, 1873	609	201	4	458
142, 911	Hill, E. A., East Cambridge, Mass. Manufacture and vulcanization of rubber for making brush-backs, &c	Sept. 16, 1873	522	177	4	307
142, 913	Hill, E. A., East Cambridge, Mass. Brush-machine	Sept. 16, 1873	524	178	4	307
142, 391	Hill, E. B., and E. Van Valkenburg, Grand Rapids, Mich. Spring bed-bottom	Sept. 2, 1873	65	21	4	247
138, 156	Hill, H., Cabin Creek, W. Va. Canal	Apr. 22, 1873	804	256	3	456
141, 350	Hill, H. H., and G. M. Sargent, Moline, Ill. Car axle-box	July 29, 1873	951	309	4	121
145, 105	Hill, H. W., assignor of one-half interest to C. P. Housum, Decatur, Ill. Hog-tongs	Dec. 2, 1873	61	20	4	590
	Hill, J., trustee. (See Knowlton, A., assignor.)					
	(Reissue).....					
142, 850	Hill, J. H., Boone, Iowa. Washing-machine	Sept. 16, 1873	474	161	4	303
137, 921	Hill, J. W., Dayton, Ohio. Automatic grain-weigher	Apr. 15, 1873	585	184	3	429
140, 826	Hill, J. W., Jefferson, Iowa. Weighing-attachment for wagons	July 15, 1873	433	147	4	63
141, 272	Same.....Combined brake and propelling mechanism for cars	July 29, 1873	876	287	4	115
142, 912	Hill, J. W., assignor to self and C. Herchelrode, Dayton, Ohio. Machine for turning wheels	Sept. 16, 1873	523	178	4	307
144, 541	Hill, J. W., assignor of one-half interest to C. Herchelrode, Dayton, Ohio. Automatic grain-weigher	Nov. 11, 1873	320	108	4	516
	Hill, P. (See Weyand & Hill.)					
140, 921	Hill, R. A., Chicago, Ill. Machine for making stereotype molds	July 15, 1873	518	174	4	69
142, 162	Hill, S. D., Downieville, Cal. Candlestick	Aug. 26, 1873	705	233	4	219
141, 558	Hill, S. G., Muscatine, Iowa, assignor of one-half interest to P. Yore, Saint Louis, Mo. Means of elevating and depressing propellers	Aug. 5, 1873	129	40	4	146
142, 568	Hill, W. B., Battle Creek, Mich. Tool-handle	Sept. 9, 1873	229	75	4	272
	Hill, W. G., et al. (See Samuels, J., assignor.)					
137, 076	Hill, W. H., Fulton, N. Y. Bolt-cutter	Mar. 25, 1873	664	220	3	328
141, 351	Hill, W. H., Worcester, Mass. Photography	July 29, 1873	952		4	121
139, 714	Hill, W. J., Fayetteville, Tenn. Peach-cutter	June 10, 1873	257	81	3	645
138, 250	Hillé, F., Brentford, England. Treatment of sewage	Apr. 29, 1873	917	289	3	473
145, 870	Hille, F., Lyons, Iowa. Lamp extinguisher	Dec. 23, 1873	754	246	4	682
144, 097	Hille, P., Union, N. J. Faucet	Oct. 28, 1873	666	219	4	463
	Hillebrand, L., et al. (See Liebrich, C., assignor.)					
	(Reissue).....					
	Hillerick, J. F. (See Bell & Hillerick.)					
144, 978	Hills, G. W., Dodge Centre, Minn. Circular harrow	Nov. 25, 1873	701	237	4	569
141, 273	Hills, H. C., assignor to self and W. Dolan, Pinckney, and G. Mills, Highland, Mich. Pruning-shears	July 29, 1873	876	287	4	115
137, 203	Hilton, C., Lockport, N. Y. Combined register and stove-pipe thimble	Mar. 25, 1873	777	256	3	337
141, 274	Hilton, J., New York, N. Y. Disinfectant compound	July 29, 1873	877		4	115
	Hiltz, A. W. (See Scott & Hiltz.)					
137, 369	Hincheer, H. A., Hustonville, Ky. Churn	Apr. 1, 1873	81	27	3	363
139, 153	Hinchman, J. C., Brooklyn, N. Y. Automatic time-printing machine	May 20, 1873	629	196	3	572
139, 154	Same.....same	May 20, 1873	631	197	3	572
141, 352	Hinchman, J. C., Summit, N. J. Electro-magnetic date-time printer and stamp	July 29, 1873	953	309	4	121
				310		
				311		
142, 786	Hinckley, E., San Francisco, Cal. Work-box	Sept. 16, 1873	424	143	4	298
135, 645	Hinckley, E. L., Bath, Me. Steam-radiator		247	78	3	159
134, 889	Hinckley, G. A., Pit Hole, Pa. Mechanism for effecting rotary motion for oil-well drills	Jan. 14, 1873	363	116	3	49
135, 988	Same.....Mechanism for operating and feeding oil-well drills	Feb. 18, 1873	555	183	3	197
135, 912	Hinckley, J. B., Nacogdoches County, Texas. Cultivator	Feb. 18, 1873	493	159	3	192
137, 922	Hinckley, J. D., Adrian, Mich. Driving gear for hand-cars	Apr. 15, 1873	586	184	3	429
140, 039	Same.....Hand-car	June 17, 1873	551	174	3	677
136, 161	Hinden, M. J., assignor to C. B. Palmer, Detroit, Mich. Hatchway-guard	Feb. 25, 1873	724	234	3	222
144, 454	Hinden, M. J., assignor to self and A. Freund, Detroit, Mich. Box-opener	Nov. 11, 1873	244	83	5	510
140, 368	Hindle, R. B., Saint Louis, Mo. Side-stick for printers' galleys	July 1, 1873	28	9	4	10
140, 369	Same.....Book-support	July 1, 1873	29	10	4	10
136, 376	Hindman, S. B., assignor of one-half interest to Matthews Brothers, Richmond, Ind. Wheel for vehicles	Mar. 4, 1873	24	8	3	247
137, 370	Hinds, J., Hindsburgh, N. Y. Bean-harvester	Apr. 1, 1873	82	27	3	364
135, 336	Hinds, R. P., Chicago, Ill. Counting-register	Jan. 28, 1873	788	255	3	111
145, 502	Hinds, W. H. H., Ayer, Mass. Candlestick	Dec. 16, 1873	420	138	4	643
	Hine, M. (See Parmelee, L., assignor.)					
137, 446	Hine, M., assignor to C. Corwles & Co., New Haven, Conn. Dash-rail for child's carriage	Apr. 1, 1873	149	48	3	369

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143, 154	Hine, M., New Haven, Conn. Machine for threading bolts.....	Sept. 23, 1873	726	250	4	334
140, 704	Hines, A. F., Washington, D. C. Butter-printing machine.....	July 8, 1873	323	109	4	46
	Hines, H. K. (See Giblin, J., assignor.)					
138, 024	Hinkel, S., Goodville, Pa. Clothes-pounder.....	Apr. 22, 1873	690	218	3	447
140, 502	Hinkle, P., San Francisco, Cal. Hydraulic hoisting-apparatus.....	July 1, 1873	136	47	4	19
139, 578	Hinkley, G. M., Milwaukee, Wis., and A. Rodgers, Muskegon, Mich. Machine for moving logs.....	June 3, 1873	115	39	3	618
139, 246	Hinkley, H. R., Milton Junction, Wis. Rolling-mill.....	May 27, 1873	728	230	3	587
134, 988	Hinman, C., Akron, Ohio. Animal-poke.....	Jan. 21, 1873	461	147	3	72
139, 893	Same.....	June 17, 1873	429	133	3	666
138, 400	Hinman, W. W., assignor of part interest to S. B. Hunter and J. Gibbs, Elkhart, Ill. Dumping-platform.....	Apr. 29, 1873	1,049	330	3	484
143, 696	Hinman, W. W., assignor to W. T. Wylie, Elkhart, Ill. Draught equalizer.....	Oct. 14, 1873	277	91	4	411
140, 626	Hinners, E. H., New York, N. Y. Cutter-head for molding.....	July 8, 1873	259	88	4	41
	Hinrichs, C. F. A. (See Kleemann, C. A., assignor.) (Reissue.)					
	Same..... (See Staehlen, W., assignor.)					
	Hinsdale, J. W., et al. (See Underwood, J. B., assignor.)					
134, 546	Hinsdill, H. M., Grand Rapids, Mich. Memorandum-book.....	Jan. 7, 1873	39	13	3	10
135, 551	Hinton, J. H., Wayne County, Ohio. Lifting-jack.....	Feb. 4, 1873	147	47	3	139
142, 465	Hinze, J., assignor to Nicholl, Burr & Co., Peoria, Ill. Smut-mill.....	Sept. 2, 1873	129	42	4	252
134, 804	Hipkins, S., jr., assignor of one-half interest to R. Heatherington, Wheeling, W. Va. Coal-boring machine.....	Jan. 14, 1873	287	93, 94	3	43
134, 805	Same..... Bit for boring coal, &c.....	Jan. 14, 1873	291	94	3	43
140, 370	Hipkins, S., jr., assignor of one-half interest to R. Heatherington, South Wheeling, W. Va. Boring-bit.....	July 1, 1873	29	10	4	10
140, 416	Hipkiss, S., Charlestown, Mass. Dash-board bag.....	July 1, 1873	63	22	4	13
141, 791	Hirons, W., and J. D. Moore, Grinnell, Iowa. Sewing-machine.....	Aug. 12, 1873	352	116	4	171
145, 347	Hirsch, H., Middlesex County, England. Construction of vessels.....	Dec. 9, 1873	280	94	4	620
	Hirst, H. D. (See Heer, D., assignor.)					
140, 705	Hisley, J. P., assignor of one-half interest to H. L. Duguid, Syracuse, N. Y. Thill-holder.....	July 8, 1873	324	110	4	46
139, 507	Hitchcock, A., New York, N. Y. Drawing-board.....	June 3, 1873	56	18	3	613
145, 653	Hitchcock, C., assignor to self and W. J. Clark, Milldale, Conn. Coffee-urn.....	Dec. 16, 1873	554	183	4	654
	Hitchcock, H. W., et al. (See Townsend, G. W., assignor.)					
	Hitchcock, J., trustee. (See Perrine, A. T., assignor.)					
	Same..... (See Talpey, J. A., assignor.)					
137, 447	Hitchcock, J., Springfield, Mass. Sewer inlet-trap.....	Apr. 1, 1873	149	49	3	369
145, 871	Hitchcock, M. T., Springfield, Mass. Car-ventilator.....	Dec. 23, 1873	754	246	4	682
134, 547	Hitchcock, R., Watertown, N. Y. Lamp.....	Jan. 7, 1873	39	13	3	10
142, 103	Same.....	Aug. 26, 1873	656	216	4	215
145, 176	Same.....	Dec. 2, 1873	129	42	4	595
137, 448	Hitchings, C. F., New York, N. Y. Boiler stand and heater.....	Apr. 1, 1873	150	49	3	369
145, 654	Same..... Boiler for warming buildings.....	Dec. 16, 1873	555	183	4	654
140, 040	Hite, J. B., Guyandotte, W. Va. Tanning-compound.....	June 17, 1873	552	.....	3	677
135, 552	Hitt, J. E., Bement, Ill. Car-coupling.....	Feb. 4, 1873	147	47	3	139
	Hittinger, M. (See Rawson, G. W., assignor.)					
134, 548	Hoadley, J. C., Lawrence, Mass. Check-valve.....	Jan. 7, 1873	41	13	3	10
143, 574	Same..... Dead-light for steam-boilers.....	Oct. 14, 1873	166	56	4	402
144, 098	Same..... Governor for steam-engines.....	Oct. 28, 1873	666	220	4	463
141, 875	Hoadley, T., Toulon, Ill. Three-horse equalizer.....	Aug. 19, 1873	440	144	4	188
143, 076	Hoag, J., San Ramon Valley, Cal. Wind-mill.....	Sept. 23, 1873	669	230	4	329
143, 575	Hoagland, A. A., and W. Mickel, Oneonta, N. Y. Mortar-mixer.....	Oct. 14, 1873	167	56	4	402
142, 392	Hoar, W., Floyd, Iowa. Spring-hinge.....	Sept. 2, 1873	65	21	4	247
	Hoard, J. W. (See Bush, C. G., assignor.)					
	Same.....					
	Same..... (Reissue.)					
138, 087	Hobart, G. W., Lowell, assignor to self, J. B. Melvin, Tewkesbury, and J. H. Pinder, Lowell, Mass. Thill-coupling.....	Apr. 22, 1873	750	237	3	452
135, 913	Hobbs, A. C., Bridgeport, Conn. Cartridge-loading machine.....	Feb. 18, 1873	494	160	3	192
137, 773	Same..... Machine for winding wads.....	Apr. 15, 1873	462	144	3	419
143, 981	Same..... Machine for interlocking cartridge-shells with bullets.....	Oct. 28, 1873	565	188	4	454
137, 680	Hobbs, A. M., Washington, D. C. Apparatus for cleaning privies and sinks.....	Apr. 8, 1873	366	113	3	396
6, 587	Hobbs, J., Bellaire, Ohio. Glass dishes and nappies..... (Design)	Apr. 15, 1873	.....	.....	3	417
6, 975	Hobbs, J., assignor to self and Belmont Glass-Works, Bellaire, Ohio. Goblet, &c. (Design)	Nov. 4, 1873	.....	.....	4	478
6, 976	Same..... Goblet, &c. (Design)	Nov. 4, 1873	.....	.....	4	478
6, 804	Hobbs, J. H., Wheeling, W. Va. Glass goblet..... (Design)	Aug. 19, 1873	.....	.....	4	185
6, 805	Same..... Glass dish..... (Design)	Aug. 19, 1873	.....	.....	4	185
139, 508	Hobbs, T. V., Chicago, Ill. Work-basket.....	June 3, 1873	56	18	3	613
134, 670	Hobson, R. G., Houlka, Miss. Plow.....	Jan. 7, 1873	163	53	3	19
139, 958	Hobson, W., Sandwich, Mass. Nursing-bottle.....	June 17, 1873	480	151	3	671
144, 274	Hochhausen, W., New York, N. Y. Self-closing telegraph-key.....	Nov. 4, 1873	88	29	4	485
	Hockensmith & Cooney. (See Cooney, W., assignor.)					
140, 041	Hockensmith, W. H., Bridgeport, Conn. Shuttle for sewing-machines.....	June 17, 1873	552	174	3	677
138, 088	Hodgdon, W., North Craftsbury, Vt. Milk-cooler.....	Apr. 22, 1873	751	238	3	452
142, 914	Hodge, C. A., Knoxville, Tenn. Piston-packing.....	Sept. 16, 1873	525	{ 178 } { 179 }	4	307
145, 419	Hodges, A. J., Peoria, Ill. Harvester-dropper.....	Dec. 9, 1873	342	114	4	625
	Hodges Edge-Trimming and Setting Machine Association. (See Hodges, S. H., assignor.)					
134, 806	Hodges, J. C., Morristown, Tenn. Hydraulic engine.....	Jan. 14, 1873	292	94	3	43
143, 761	Hodges, J. W., New York, assignor to self and J. W. Harway, Bay Side, N. Y. Steam-trap.....	Oct. 21, 1873	356	118	4	427
146, 073	Hodges, J. W., New York, assignor to J. W. Harway, Bay Side, N. Y. Valve for steam-pipes.....	Dec. 30, 1873	953	308	4	709
	Hodges, P. F. (See Bayliss, Brown & Lomont, assignors.)					
142, 231	Hodges, P. F. assignor of nine-twelfths interest to E. Bayliss, J. O. Brown, and F. T. Lomont, Massillon, Ohio. Harvester.....	Aug. 26, 1873	763	251	4	224
	Hodges, S. H. (See Maloy, J. W., assignor.)					
	Hodges, S. H., et al. (See Maloy, J. W., assignor.)					
136, 916	Hodges, S. H., assignor to The Hodges Edge-Trimming and Setting Machine Association, Lynn, Mass. Attachment for heel trimming and burnishing machines.....	Mar. 18, 1873	509	168	3	304
	Hodgins, J. C. (See Dilworth & Hodgins) (Reissue.)					
139, 313	Hodgson, E. M., Stanhope, N. J. Washing-machine.....	May 27, 1873	787	250	3	592
141, 792	Hodgson, H. E., Knoxville, Tenn. Organ free-reed.....	Aug. 12, 1873	354	116	4	171
	Hoe, R. & Co. (See Mead, T. H., assignor.)					
	Hoe, R. M., New York, N. Y. Feeding paper to printing-presses..... (Extension)	Aug. 23, 1873	.....	.....	4	185
	Hoe, R. M., West Farms, N. Y. Machine for printing railway and other tickets. (Extension)	Mar. 8, 1873	.....	.....	3	244

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 285	Hoff, E. C., <i>et al.</i> (See Spencer, J. C., assignor.)					
135, 914	Hoffliger, P. J., Philadelphia, Pa. Clock and watch key	Sept. 30, 1873	843	290	4	360
141, 876	Hoffman, A. D., assignor of one-half interest to N. Friedman, Chicago, Ill. Door-spring	Feb. 18, 1873	495	160	3	192
	Hoffman, A. D., assignor by mesne assignment of part interest to N. Friedman and A. Liebenstein, Chicago, Ill. Combination-lock	Aug. 19, 1873	441	144	4	188
142, 393	Hoffman, J., Toledo, Ohio. Corpse-cooler	Sept. 2, 1873	65	22	4	247
143, 825	Hoffman, J., Belvidere, N. J. Safety-valve	Oct. 21, 1873	410	137	4	432
	Hoffman, N. (See Ellis, Hoffman & Lee.)					
140, 503	Hoffmann, J., Waterbury, Conn. Automatic rope-skipper	July 1, 1873	138	47	4	19
	Hoffmark, B. (See Schpakowsky, A., assignor.)					
145, 177	Hoffmeyer, A. B., and J. Schmidt, Copenhagen, Denmark. Rotary plow	Dec. 2, 1873	131	43	4	596
134, 989	Hoffmire, J. E., New Brunswick, N. J. Velocipede	Jan. 21, 1873	462	148	3	72
135, 274	Hofmann, M., Darlington, Wis. Extension-table	Jan. 28, 1873	731	235	3	106
137, 841	Hofstatter, A. G., New York, N. Y. Door-bolt	Apr. 15, 1873	520	162	3	423
137, 923	Hofstatter, D. F., and W. H. Shaw, New London, Ohio. Swage for forming horseshoes	Apr. 15, 1873	587	185	3	429
142, 104	Hogan, J., South Boston, Mass. Car-axle box	Aug. 26, 1873	659	216	4	215
138, 563	Hoge, T., Washington, D. C. Blast-governor for grain-separator	May 6, 1873	87	28	3	504
6, 357	Hogg, W. J., assignor to W. Hogg, jr., Philadelphia, Pa. Carpet (Design)	Jan. 21, 1873			3	70
144, 979	Hoggson, S. J., assignor to American Enamel Decorating Company, New Haven, Conn. Apparatus for printing upon and decorating enameled surfaces	Nov. 25, 1873	702	237	4	569
136, 722	Hogue, S. C., Oskaloosa, Iowa. Composite-roofing	Mar. 11, 1873	337		3	281
136, 059	Hohorst, F., New York, N. Y. Sling for raising animals	Feb. 18, 1873	616	202	3	202
141, 930	Holbrook, A., Providence, R. I. Mallet	Aug. 19, 1873	485	160	4	191
	Holbrook, H. H. (See Walker & Holbrook.)					
142, 787	Holbrook, O. R., Staffordville, Conn. Cloth-measuring device	Sept. 16, 1873	424	143	4	298
	Holcomb, A. P. (See Huntley & Holcomb.)					
138, 089	Holcomb, A. P., <i>et al.</i> (See Huntley, W. W., assignor.)					
	Holdam, W. H., Crab Orchard, Ky. Churn	Apr. 22, 1873	752	238	3	452
	Holden, E., <i>et al.</i> (See Lones, Vernon & Holden.)					
	Holden, L. L., <i>et al.</i> (See Rogers, E. F., assignor.)					
	Holden, S. B., <i>et al.</i> (See Rogers, E. F., assignor.)					
145, 946	Holderman, L., New Paris, Ind. Washing-machine	Dec. 30, 1873	846	275	4	700
138, 090	Holdsorth, S., Maspeth, assignor to self and J. Black, Brooklyn, N. Y. Loom for weaving wire	Apr. 22, 1873	753	238	3	452
	Holihan, T. (See Neville, J., assignor.)					
	Holland, A. C. (See Hollen & Holland.)					
	Holland, C. (See Frear, G. A., assignor.)					
135, 118	Holland, J., Cincinnati, Ohio. Writing-pen	Jan. 21, 1873	569	185	3	81
	Holland, W. (See Cox & Holland.)					
143, 982	Hollely, J., Brooklyn, assignor of one-half interest to H. E. Towle, New York, N. Y. Automatic fastening for sashes, &c.	Oct. 28, 1873	567	188	4	455
136, 723	Hollenback, A. J., North Bangor, N. Y. Combined latch and lock	Mar. 11, 1873	337	112	3	281
137, 842	Hollen, F., and A. C. Holland, Marion, Ill. Corn sheller	Apr. 15, 1873	521	162	3	423
142, 629	Hollenweger, F. J., New Rochelle, assignor to self, J. Martin, and C. F. Spaulding, New York, N. Y. Rotary engine	Sept. 9, 1873	277	91	4	276
136, 997	Holler, B., Brooklyn, N. Y. Camera-stand	Mar. 18, 1873	579	193	3	310
	Holley, A. L. (See Moore, George & Holley.)					
5, 317	Holley, A. L., Brooklyn, N. Y. Stopper for ingot-molds (Reissue)	Mar. 11, 1873	406	134	3	287
5, 318	Same. Ingot-mold (Reissue)	Mar. 11, 1873	407	135	3	287
	Holley, M. Y. (See Wright, Holley & Miles.)					
6, 956	Hollis, J. O., Boston, Mass. Door-knob (Design)	Oct. 14, 1873			4	401
135, 915	Hollis, S. P., and H. B. Chess, Pittsburgh, Pa. Machine for cutting nails	Feb. 18, 1873	495	161	3	192
143, 346	Hollingsworth, J., New York, N. Y. Middlings-purifier	Sept. 30, 1873	903	307	4	364
140, 042	Hollingsworth, R. J., assignor to L. McMurray, Baltimore, Md. Soldering-tool	June 17, 1873	553	175	3	677
139, 388	Hollister, J. F., Plano, Ill. Machine for cutting and punching leather straps	May 27, 1873	848	271	3	597
	Hollmann, G. H. (See Nicoll & Hollmann.)					
	Holloway, E. S. (See Fawcett, E. W., assignor.)					
140, 627	Holloway, W., Buffalo, N. Y. Button-fastening	July 8, 1873	259	88	4	41
138, 650	Holley, E. P., Lockport, N. Y. Fluting-machine	May 6, 1873	160	52	3	510
142, 232	Holly, H. W., Brooklyn, N. Y. Canvas-stretcher	Aug. 26, 1873	765	251	4	224
144, 764	Holly, H. W., Brooklyn, assignor to L. A. Jocelyn, Yonkers, N. Y. Rubber for slates and blackboards	Nov. 18, 1873	514	174	4	543
145, 947	Holly, J. H., and J. F. Robertson, Warwick, N. Y. Pitman	Dec. 30, 1873	847	275	4	700
143, 347	Holman, D. S., Philadelphia, Pa. Marking-pen	Sept. 30, 1873	905	307	4	364
	Holman, G., <i>et al.</i> (See Enos, J. A., assignor.)					
144, 542	Holman, H. W., Waterloo, Iowa. Dried-fruit loosener	Nov. 11, 1873	321	109	4	516
143, 011	Holman, J. F. L., assignor of one-half interest to E. Henwood, Hamilton, Canada. Car-coupling	Sept. 23, 1873	614	209	4	325
	Holmes, A. M. (See Hopkins, H. L., assignor.)					
	Holmes, B. (See Holmes, E. and B.)					
	Holmes, B., <i>et al.</i> (See Wilde, H., assignor) (Reissue.)					
135, 989	Holmes, B., New York, N. Y. Bed-bottom	Feb. 18, 1873	556	184	3	197
142, 696	Holmes, C. P., Havana, N. Y. Rotary pump	Sept. 9, 1873	334	112	4	281
	Holmes, E. (See Cowles, E., assignor) (Reissue.)					
	Holmes, E., <i>et al.</i> (See Wilde, H., assignor) (Reissue.)					
141, 003	Holmes, E. and B., Buffalo, N. Y. Machine for jointing staves	July 22, 1873	612	207	4	86
139, 674	Holmes, E. S., Grand Rapids, Mich. Cap setting and extracting device	June 10, 1873	215	70	3	642
142, 697	Holmes, F. M., Boston, Mass. Clamp	Sept. 9, 1873	335	112	4	281
141, 053	Holmes, F. P., North Bridgewater, Mass. Game-board	July 22, 1873	652	220	4	90
142, 339	Holmes, H. A., Epsom, N. H. Machine for sawing clapboards	Sept. 2, 1873	15	6	4	243
143, 348	Holmes, J., Evanston, Ill., assignor of one-half interest to G. Walker, Salt Lake, Utah. Coupling for gas and water pipes	Sept. 30, 1873	905	308	4	364
141, 506	Holmes, J. A., Philadelphia, Pa. Casting steel ingots	Aug. 5, 1873	85	27	4	142
	Holmes, J. F. (See Jones J., assignor.)					
	Holmes, J. H. (See Bull, J. D., assignor.)					
	Holmes, J. H. (See Perkins, R. W., assignor.)					
	Same. same. (Design.)					
5, 343	Holmes, K. W., Winona, Minn., and A. Albright, Newark, N. J., said Holmes assignor to said Albright. Coating wood with rubber, gutta-percha, &c. (Reissue)	Apr. 1, 1873	226		3	375
142, 233	Holmes, N. L., assignor of one-half interest to C. H. De Groat, Fond du Lac, Wis. Skein and box for vehicle wheels	Aug. 26, 1873	766	251	4	224
142, 018	Holmes, S., Philadelphia, Pa. Machine for bending and twisting metal bars	Aug. 19, 1873	557	{ 184 185 }	4	197
139, 789	Holmes, S., and W. M. Bowron, Philadelphia, Pa. Iron-ship building	June 10, 1873	330	102	3	651
135, 806	Holmes, T., Brooklyn, N. Y. Carbureting-apparatus	Feb. 11, 1873	393	126	3	170

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 948	Holmes, T. J., Malden, Mass. Shirt button or stud	Dec. 30, 1873	847	275	4	700
	Holmes, W. (See Crandall, J. W., assignor.)					
136, 833	Holroyd, J., Washington, D. C. Hooks and eyes for tackle-blocks	Mar. 18, 1873	443	147	3	299
140, 628	Holsey, J. H., Butler, Ga. Blasting-plug	July 8, 1873	259	88	4	41
138, 157	Holt, G. L., and J. C. Marshall, assignors to E. H. & A. A. Buckland, Springfield, Mass. Breech-loading fire-arm	Apr. 22, 1873	805	256	3	456
	Holt, G. R. (See Hawkins, J. T., assignor.)					
	Holt, H. (See Gould, J. H., assignor.)					
5, 555	Holt, H., Brooklyn, N. Y., assignor by mesne assignment to Secombe Manufacturing Company, New York, N. Y. Hand-stamp	Aug. 26, 1873	849	280	4	231
140, 136	Holt, N. J., Howell, and J. Leach, Detroit, Mich. Clamp	June 24, 1873	657	206	3	693
136, 515	Holte, A. K., Chicago, Ill. Fire-proof building	Mar. 4, 1873	145	47	3	257
136, 834	Holton, M. G., assignor of one-half interest to S. Green, Rochester, N. Y. Fish-spawn hatches	Mar. 18, 1873	443	147	3	299
136, 323	Holton, S., Middlebury, Vt. Addressing-machine	Feb. 25, 1873	859	276	3	232
139, 247	Holtz, C., assignor to J. H. Vornbrock, Saint Louis, Mo. Self-rocking cradle	May 27, 1873	729	230	3	587
141, 793	Holtz, J., assignor of one-half interest to E. Higgins, Baltimore, Md. Match-box	Aug. 12, 1873	354	116	4	171
	Holzer, E. R. (See Holzer, J. & E. R.)					
139, 389	Holzer, J. & E. R., Philadelphia, Pa. Settee	May 27, 1873	850	{ 271 272 }	{ 3 }	597
141, 645	Home, J. K., Almonte, Canada. Pattern for pipe-elbows.	Aug. 12, 1873	221	70	4	161
	Homelius, P. (See Allison & Homelius.)					
137, 843	Hood, C., Seneca Falls, N. Y. Cooking-apparatus	Apr. 15, 1873	521	{ 162 163 }	{ 3 }	424
	Hood, G. E. (See Kidder & Hood.)					
	Same... (See Kidder, J. H., assignor.)					
	Hood, H. C., et al. (See Allen, C. L., assignor.)					
134, 990	Hood, H. P., Indianapolis, Ind. Washer for nut-fastenings	Jan. 21, 1873	463	148	3	72
135, 553	Hood, H. P., Indianapolis, Ind., and W. Coombs, Bangor, Me. Nut-lock	Feb. 4, 1873	148	47	3	139
142, 630	Hood, H. P., assignor of one-half interest to N. B. Cooper, Indianapolis, Ind. Burglar-alarm	Sept. 9, 1873	279	91	4	276
136, 516	Hood, J. H., Dansville, N. Y. Roofing	Mar. 4, 1873	145	47	3	257
	Hood, J. L., et al. (See Allen, C. L., assignor.)					
	Hood, T., et al. (See Hunter, R. F., assignor.)					
141, 353	Hook, A. H., assignor to C. F. Hervé, C. C. Tracy, and W. A. Shaw, New York, N. Y. Mold for casting stench-traps	July 29, 1873	955	311	4	121
145, 735	Hooper, C. A., San Francisco, Cal. Manufacture of cigar-boxes from redwood	Dec. 23, 1873	640	.....	4	673
138, 025	Hooper, R., Baltimore, Md. Steam-generator	Apr. 22, 1873	691	218	3	447
139, 390	Hooper, W., Ticonderoga, N. Y. Ore-washer	May 27, 1873	850	272	3	598
	Hooper, W. E. & Sons. (See Milstead, A. J., assignor.)					
	Hooper, W. T. (See Masterman & Hooper.)					
	Hoosier Drill Company. (See Ingels & Mount, assignors.)					
	Hooton, F. C., et al. (See Hayes, J. R., assignor.)					
139, 790	Hoover, J., Lancaster, Pa. Washing-machine	June 10, 1873	330	102	3	651
5, 556	Hope, E. T., Philadelphia, Pa., assignor to S. I. Thursby, Brooklyn, N. Y. Elevator. (Reissue)	Aug. 26, 1873	849	280	4	231
142, 394	Hope, J. G., Wichita, Kans. Projectile	Sept. 2, 1873	66	22	4	247
143, 762	Hopkin, W., jr., Philadelphia, Pa. Cooking-range	Oct. 21, 1873	356	119	4	427
	Hopkins and Dickinson Manufacturing Company. (See Collins, J., assignor.)					
136, 724	Hopkins, C. H., Lyndonville, Vt. Cylinder-cock for locomotives, &c.	Mar. 11, 1873	338	112	3	281
139, 791	Hopkins, D. A., Jersey City, N. J. Attachment to car-axle boxes	June 10, 1873	331	103	3	651
145, 655	Hopkins, E. R., Newark, N. J., assignor of three-fourths interest to N. P. Threadwell, New York, N. Y. Manufacture of illuminating-gas	Dec. 16, 1873	556	183	4	654
139, 579	Hopkins, G. M., Albion, N. Y. Gas-regulator for vulcanizers	June 3, 1873	116	39	3	618
143, 012	Hopkins, H. H., Norwich, Conn. Breech-loading fire-arm	Sept. 23, 1873	615	209	4	325
145, 178	Hopkins, H. L., assignor of one-half interest to A. M. Holmes, Morrisville, N. Y. Safety-pocket	Dec. 2, 1873	132	43	4	596
141, 438	Hopkins, J., Akron, Ohio. Animal-poke	Aug. 5, 1873	25	8	4	137
142, 019	Hopkins, P. H., Brooklyn, N. Y. Machine for cutting, rubbing and drilling stone	Aug. 19, 1873	559	185	4	198
144, 099	Hopkins, L. D., Milford, Kans. Sower, planter, and cultivator	Oct. 28, 1873	667	220	4	463
	Hopkins, W. (See Picking & Hopkins.)					
	Hopkins, W. A., et al. (See McGregor & Vall, assignors)					
143, 242	Hopkins, W. P., Lawrence, Mass. Gear-cutting attachment to lathes	Sept. 30, 1873	808	278	4	356
136, 998	Hoppenan, H., Kansas City, Mo. Breech-loading fire-arm	Mar. 18, 1873	580	193	3	310
137, 924	Hopping, E. C., assignor of one-half interest to E. A. Ely, Madison, N. J. Mechanical movement	Apr. 15, 1873	587	185	3	429
145, 872	Hopping, E. C., Madison, N. J. Mowing-machine	Dec. 23, 1873	755	246	4	682
5, 219	Hopson, G., Bridgeport, Conn. Manufacture of spring-heads	Jan. 7, 1873	209	67	3	23
143, 576	Same..... Carriage-spring	Oct. 14, 1873	168	56	4	403
6, 425	Horan, H., Newark, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Feb. 18, 1873	.....	.....	3	189
6, 426	Same..... Carpet	Feb. 18, 1873	.....	.....	3	189
6, 427	Same..... same	Feb. 18, 1873	.....	.....	3	189
6, 428	Same..... same	Feb. 18, 1873	.....	.....	3	189
6, 518	Same..... same	Mar. 25, 1873	.....	.....	3	325
6, 519	Same..... same	Mar. 25, 1873	.....	.....	3	325
6, 520	Same..... same	Mar. 25, 1873	.....	.....	3	325
6, 596	Same..... same	Apr. 22, 1873	.....	.....	3	444
6, 597	Same..... same	Apr. 22, 1873	.....	.....	3	444
6, 598	Same..... same	Apr. 22, 1873	.....	.....	3	444
6, 599	Same..... same	Apr. 22, 1873	.....	.....	3	444
6, 600	Same..... same	Apr. 22, 1873	.....	.....	3	444
6, 601	Same..... same	Apr. 22, 1873	.....	.....	3	444
6, 602	Same..... same	Apr. 22, 1873	.....	.....	3	444
6, 932	Horan, H., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Oct. 7, 1873	.....	.....	4	380
7, 025	Same..... same	Dec. 9, 1873	.....	.....	4	614
7, 026	Same..... same	Dec. 9, 1873	.....	.....	4	614
7, 027	Same..... same	Dec. 9, 1873	.....	.....	4	614
7, 028	Same..... same	Dec. 9, 1873	.....	.....	4	614
7, 029	Same..... same	Dec. 9, 1873	.....	.....	4	614
7, 030	Same..... same	Dec. 9, 1873	.....	.....	4	614
7, 031	Same..... same	Dec. 9, 1873			4	614
7, 032	Same..... same	Dec. 9, 1873			4	614
7, 033	Same..... same	Dec. 9, 1873			4	614

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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7,060	Horan, H., East Orange, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet..... (Design).....	Dec. 16, 1873			4	641
7,061	Same..... same..... (Design).....	Dec. 16, 1873			4	641
142,105	Horne, A. A., Mount Morris, N. Y. Adjustable stay-spring for vehicles.....	Aug. 26, 1873	659	216	4	215
144,202	Horney S., Richmond, Ind. Scraper.....	Nov. 4, 1873	27	8	4	480
141,439	Hornfager, W. C., and M. Fitz Gibbons, New York, N. Y. Oyster-dredge.....	Aug. 5, 1873	26	8	4	137
139,391	Horr, O. W., Chicopee Falls, Mass. Toy pistol.....	May 27, 1873	852	273	3	598
144,980	Horton, C. B., Waterloo, N. Y. Grain-scourer.....	Nov. 25, 1873	703	237	4	569
142,163	Horton, E., Windsor Locks, Conn. Chuck.....	Aug. 26, 1873	706	233	4	219
144,100	Same..... Serew-threading machine.....	Oct. 28, 1873	668	{ 220 221 }	{ 4 4 }	{ 463 463 }
	Horton, E. E. (See Heywood & Horton).....					
	Horton, J. (See Jewett, G. H., assignor.).....					
	Horton, J. M. (See Chapman, E. C., assignor.).....					
144,674	Horton, P. B., San Francisco, Cal. Blackboard-rubber.....	Nov. 18, 1873	438	148	4	537
6,521	Hoskin, R., assignor to C. M. Bailey, New York, N. Y. Carpet..... (Design).....	Mar. 25, 1873			3	325
139,715	Hoskins, W. J., and A. D. Rowe, Essex, N. Y. Relisher and wedge-cutter.....	June 10, 1873	258	81	3	645
135,807	Hoskins, W. T., Livia, Ky. Ditching-machine.....	Feb. 11, 1873	393	127	3	170
	Hosmer, F. H. (See Kelsey & Hosmer.).....					
	Hosmer, J. A. (See Kelsey & Hosmer.).....					
136,436	Hosmer, T., Sandusky, Ohio. Life-preserving float.....	Mar. 4, 1873	72	25	3	251
	Hotchkiss, B., New Haven, Conn. Trip-hammer..... (Extension).....	June 14, 1873			3	640
	Hotchkiss, E. H. (See Gladney, R., assignor.).....					
138,251	Hotchkiss, J., and P. N. Woliston, Springfield, Ohio. Brick-machine.....	Apr. 29, 1873	919	{ 289 290 }	{ 3 3 }	{ 473 473 }
135,275	Hotchkiss, T., Stratford, Conn. Paper-bag machine.....	Jan. 28, 1873	732	{ 235 236 }	{ 3 3 }	{ 106 106 }
143,155	Hothersall, J., New York, N. Y. Carpet-beater.....	Sept. 23, 1873	727	250	4	334
138,158	Houck, G. O., Springfield, Ohio. Corn-planter.....	Apr. 22, 1873	806	257	3	456
139,894	Houck, G. O., and C. E. Sawyer, Springfield, Ohio. Brick-machine.....	June 17, 1873	430	134	3	666
145,060	Hough, E., Brooklyn, N. Y. Machine for heading hair.....	Dec. 2, 1873	18	7	4	587
	Hough, J. (See Swickard, J. W., assignor.).....					
144,847	Hough, W. S., Galt, assignor to self and S. Cornell, Widder Station, Canada. Bee-hive.....	Nov. 25, 1873	598	203	4	560
	Houghtaling, W. (See George & Houghtaling.).....					
	Houghton, C. (See Wightman, J. C., assignor.).....					
144,455	Houghton, W., Great Grimsby, England. Grain-cleaner.....	Nov. 11, 1873	245	83	4	510
145,569	Houlding, T., Ipswich, Mass. Spinning-mule.....	Dec. 16, 1873	485	159	4	648
136,917	Houpt, J., Springtown, Pa. Condensing-apparatus for steam-engines.....	Mar. 18, 1873	511	169	3	304
136,918	Same..... Jet condenser for steam-engines.....	Mar. 18, 1873	513	169	3	304
144,203	Same..... Condensing-apparatus for marine steam-engines.....	Nov. 4, 1873	28	8, 9	4	480
136,599	House, H. A., Bridgeport, Conn. Garter.....	Mar. 11, 1873	234	79	3	273
138,026	Same..... Bundling kindling wood and other substances.....	Apr. 22, 1873	692	219	3	447
138,027	Same..... Machine for bundling kindling wood and other substances.....	Apr. 22, 1873	695	220	3	447
143,243	Same..... Wood-compressor.....	Sept. 30, 1873	809	278	4	356
145,570	House, J. A., assignor to Wheeler and Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine.....	Dec. 16, 1873	486	{ 159 160 }	{ 4 4 }	{ 619 619 }
	House, J. E. (See Congdon & House.).....					
137,306	House, M. W., assignor to the Cleveland Non-explosive Lamp Company, Cleveland, Ohio. Shade-holder.....	Apr. 1, 1873	23	7	3	359
141,223	House, M. W., Cleveland, Ohio. Shade-holder for lamps.....	July 29, 1873	828	271	4	111
	Same..... Can for oils and other liquids.....	July 29, 1873	829	271	4	111
141,224	House, P. C., West Randolph, Vt. Wheel for vehicles.....	Aug. 12, 1873	280	91	4	166
141,715	House, W., Aurora, Ind. Corn-planter.....	Oct. 21, 1873	478	161	4	437
143,905	Houser, S. R., Upper Sandusky, Ohio. Machine for punching and shearing.....	Oct. 7, 1873	94	33	4	388
143,510	Houston, E. J., Nacoochee, Ga. Flooring-tongs.....	Feb. 18, 1873	497	161	3	192
135,916	Houston, E. J., assignor of one-half interest to E. T. Starr, Nacoochee, Ga. Mortising-machine.....	Feb. 18, 1873	497	161	3	192
135,917	Houston, L., Smithville, N. J. Mortising-machine.....	Jan. 28, 1873	789	255	3	111
135,337	Housum, C. P. (See Hill, H. W., assignor.).....					
142,466	Houts, A., deceased, by E. Houts, administrator, Salona, Pa. Railway-gate.....	Sept. 2, 1873	130	42	4	252
	Houts, E., administrator. (See Houts, A.).....					
	How, M. (See Bond, H., assignor.).....					
140,922	How, W. S., Cincinnati, Ohio. Toy-catapults.....	July 15, 1873	519	{ 174 175 }	{ 4 4 }	{ 70 70 }
	Howard, A. et al. (See Culmer, J. W., assignor.).....					
139,792	Howard, B., assignor to self and T. Watkins, Saint Clair, Pa. Fire and burglar-proof safe.....	June 10, 1873	331	103	3	651
137,844	Howard, A. F., assignor to Z. Parmenter and A. H. Walker, Waltham, Mass. Crayon-holder.....	Apr. 15, 1873	522	163	3	424
	Howard, C. (See Howard, L. & C.).....					
135,710	Howard, C., New York, N. Y. Paddle-mechanism for boat.....	Feb. 11, 1873	305	96	3	164
	Howard, C. & Co. (See Brooks, J., assignor.).....					
144,905	Howard, C. A., Pontiac, Mich. Nut-lock.....	Nov. 25, 1873	641	218	4	564
136,725	Howard, C. C., Lowndesborough, Ala. Cotton-press.....	Mar. 11, 1873	339	112	3	281
136,919	Howard, C. H., Batavia, N. Y. Composition sidewalk.....	Mar. 18, 1873	514		3	305
	Howard, C. L., et al. (See Milroy, J. W., assignor.).....					
140,043	Howard, D. S., Drury's Bluff, Va. Combined roller and irrigator.....	June 17, 1873	554	175	3	677
5,306	Howard, E., Flushing, and W. H. Jackson, Brooklyn, N. Y., assignors by mesne assignment to H. E. Townsend, C. P. Brigham, and G. W. Simmons, Boston, Mass. Sewing-machine for working button-holes..... (Reissue).....	Mar. 4, 1873	208	{ 68 69 }	{ 3 3 }	{ 262 262 }
5,336	Same..... Sewing-machine for making button-holes..... (Reissue).....	Mar. 25, 1873	846	278	2	342
	Howard, E. I. (See Tesseyman & Howard.).....					
142,395	Howard, F. E., Geneseo, N. Y. Car-coupling.....	Sept. 2, 1873	67	22	4	247
139,392	Howard, G. C., and J. Dainty, deceased, by A. J. Dainty, administratrix, assignors to G. C. Howard, Philadelphia, Pa. Plate-printing press.....	May 27, 1873	853	273	3	598
136,060	Howard, J. L., Hartford, Conn. Spittoon.....	Feb. 18, 1873	616	202	3	202
143,411	Same..... Railway-car lamp.....	Oct. 7, 1873	12	4	4	382
136,726	Howard, J. W., Greenville, Ala. Subsoil-plow.....	Mar. 11, 1873	340	112	3	281
135,338	Howard, L. & C., Watkins, N. Y. Machines for twisting oakum.....	Jan. 28, 1873	791	256	3	111
139,314	Howard, M. B., Ellsworth, Nev. Apparatus for separating quicksilver from amalgam.....	May 27, 1873	787	251	3	592
5,402	Howard, O. B., Deering, assignor of one-half interest to O. P. Shepherd, Portland, Me. Razor-strop..... (Reissue).....	May 13, 1873	455	143	3	545
141,221	Howard, O. S., assignor to self and Henckley and Egery Iron Company, Bangor, Me. Device for centering piston-heads.....	July 29, 1873	827	270	4	111

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
5, 240	Howard, W. T., Baltimore, Md., assignor to H. G. Leisenring. Broiler..... (Reissue)...	Jan. 21, 1873	633	207	3	86
137, 550	Howard, W. T., Baltimore, Md. Machine for raising oyster-dredges.....	Apr. 8, 1873	253	78	3	389
	Howarth, F. A. (See Fox & Howarth.)					
137, 204	Howdon, R. J., Cincinnati, Ohio. Casting bottoms on sheet-metal vessels.....	Mar. 25, 1873	778	257	3	337
134, 671	Howe, G. W., Vineland, N. J. Separator for thrashing-machines.....	Jan. 7, 1873	163	54	3	19
141, 222	Same..... Reversible plow.....	July 29, 1873	828	270	4	111
136, 727	Howe, J., Milford, Mass., assignor to the Shoe-Machinery Manufacturing Company, Conn. Cylinder for sole-buffing machines.....	Mar. 11, 1873	341	113	3	282
145, 802	Howe, L., Oshtemo, Mich. Construction of cisterns.....	Dec. 23, 1873	694	228	4	678
5, 419	Howe, M. G., et al. (See Richardson, J. D., assignor.)					
	Howe, M. V., assignor to Heywood Brothers & Co., Gardner, Mass. Tilting-chair.. (Re-issue).....	May 20, 1873	703	{ 220 } { 221 }	{ 3 }	578
	Howe, R., and Company. (See Chaput, L. G., assignor.)					
	Howe, T., Cambridgeport, Mass. Bedstead-slat..... (Extension)...	Sept. 27, 1873			4	322
143, 763	Howe, W. B., Troy, N. Y. Car axle-box.....	Oct. 21, 1873	357	119	4	427
	Howe, W. H. I. (See Wright, J. W., assignor.)					
136, 920	Howe, W. H. I., New York, N. Y. Sealed can.....	Mar. 18, 1873	515	169	3	305
137, 681	Howell, C. H., assignor of one-half interest to H. D. Howell, Middletown, Del. Jump-seat for wagons.....	Apr. 8, 1873	366	114	3	398
5, 414	Howell, E., Ashtabula, Ohio. Hemmer for sewing-machines..... (Reissue)...	May 20, 1873	697	219	3	577
142, 569	Howell, G. W., Covington, Ky. Cut-off for cisterns.....	Sept. 9, 1873	230	75	4	272
	Howell, H. D. (See Howell, C. H., assignor.)					
	Howell, J. (See Mayel & Howell.)					
	Howell, J. M. (See Tadlock, J. S., assignor.)					
	Howell, T. P. (See Oliver, C. P., assignor.)					
135, 429	Howes, C. F., Philadelphia, Pa., assignor to self and R. W. Howes, Boston, Mass. Telegraph-pole.....		35	10	3	130
145, 873	Howes, F. M., Somerville, Mass. Means for chocking and securing boats.....	Dec. 23, 1873	756	247	4	683
	Howes, R. W. (See Howes, C. F., assignor.)					
134, 602	Howitt, E. A., White Water, Wis. Chromatic printing-press attachment.....	Jan. 7, 1873	99	32	3	15
139, 155	Same..... Inking attachment for chromatic printing.....	May 20, 1873	634	198	3	572
144, 456	Howland, E., Hammonton, N. J. Wine-press.....	Nov. 11, 1873	246	83	4	510
	Howland, G. (See Palser & Howland)..... (Disclaimer.)					
	Same..... same..... (Extension.)					
135, 554	Howland, G., Brunswick, N. Y. Coal-scuttle.....	Feb. 4, 1873	149	47, 48	3	139
136, 999	Same..... Combined slop-pail and commode.....	Mar. 18, 1873	581	193	3	310
138, 159	Same..... Water-proof plastic cement for roofing.....	Apr. 22, 1873	807		3	456
142, 234	Howland, H. C., and T. L. Moore, Oxford, N. Y. Hay-loader.....	Aug. 26, 1873	766	252	4	224
	Howlett, F. (See Clayton & Howlett.)					
135, 430	Howson, B., et al. (See Brown, W. F., assignor.)					
7, 071	Howson, H., assignor to S. B. Rowley, Philadelphia, Pa. Fruit-jar.....	Feb. 4, 1873	35	10	3	130
138, 564	Hoyer, R., New York, N. Y. Harness-trimming..... (Design)...	Dec. 23, 1873			4	671
144, 675	Hoyland, W., Newcastle, Pa. Reverberatory furnace.....	May 6, 1873	88	28	3	504
	Same..... Fire-place.....	Nov. 18, 1873	438	148	4	537
	Hoysradt, J. W., et al. (See Harris, S. W., assignor)..... (Reissue.)					
141, 507	Hoyt, A. S., Winona, Minn. Grain-binder.....	Aug. 5, 1873	86	27	4	142
135, 808	Hoyt, E., Stamford, Conn. Washing-machine.....	Feb. 11, 1873	393	127	3	170
144, 906	Same..... Bed-bottom.....	Nov. 25, 1873	642	218	4	564
136, 517	Hoyt, F. A., assignor of two-thirds interest to G. A. Little and Dean, Smith & Co., La Crosse, Wis. Machine for dressing mill-stones.....	Mar. 4, 1873	146	47	3	257
140, 197	Hoyt, F. T., Brooklyn, N. Y. Pantaloon.....	June 24, 1873	710	223	3	697
142, 788	Hoyt, H. I., Norwalk, Conn. Valve for steam-engines.....	Sept. 16, 1873	425	143	4	298
6, 760	Hoyt, J. (See Kirby, S. R., assignor.)					
	Hoyt, J. W., Springfield, Mass. Railway-station..... (Design)...	July 8, 1873			4	36
	Hoyt, R. E. (See Leonard, J. D., assignor.)					
	Hoyt, W. R. (See Coffin, F. E., assignor.)					
140, 827	Huard, D., Ashland, Wis. Last-block fastener.....	July 15, 1873	434	147	4	63
141, 225	Hubbard, C. W., Pittsburgh, Pa. Saw-buckle.....	July 29, 1873	830	271	4	111
135, 555	Hubbard, E. C., Green Bay, Wis. Propeller for vessels.....	Feb. 4, 1873	149	48	3	139
134, 672	Hubbard, E. R., assignor to self and G. Farr, New York, N. Y. Brick-machine.....	Jan. 7, 1873	164	54	3	19
138, 401	Hubbard, F., and E. B. Severance, assignors to the Merriam Manufacturing Company, Durham, Conn. Toy.....	Apr. 29, 1873	1,049	330	3	484
136, 728	Hubbard, G. M., assignor to W. and E. T. Fitch, New Haven, Conn. Snap-hook.....	Mar. 11, 1873	342	113	3	282
143, 013	Hubbard, G. W., Philadelphia, Pa. Elevator.....	Sept. 23, 1873	616	209	4	325
	Hubbard, J. H. (See Daniels & Hubbard.)					
	Hubbard, M. G. (See Crook, C., assignor)..... (Reissue.)					
	Hubbard, M. G., Syracuse, N. Y. Harvesting-machine..... (Extension)...	May 10, 1873			3	497
135, 809	Same..... Metallic washer.....	Feb. 11, 1873	394	127	3	170
	Hubbard, N. (See Loretz, A. J. L., assignor.)					
	Hubbell, A. F., et al. (See Burt, J., assignor)..... (Reissue.)					
	Hubbell, A. S. (See Hubbell, H. S. and A. S.)..... (Design)...					
6, 977	Hubbell, H. S. and A. S., Buffalo, N. Y. Stove..... (Design)...	Nov. 4, 1873			4	478
6, 978	Same..... same..... (Design)...	Nov. 4, 1873			4	478
	Hubbell, J. H. (See Heidt, A. P., assignor.)					
143, 412	Hubbell, N. C., assignor to J. Johnson, A. Whitney, Hartford, and A. Corban, Plainville, Conn. Machine for making metal screws.....	Oct. 7, 1873	13	4, 5, 6	4	382
144, 848	Hubbell, T. K., and G. H. Gregory, Wilton, Conn. Self-closing railway-switch.....	Nov. 25, 1873	599	204	4	560
137, 205	Hubbell, W. L., Brooklyn, N. Y. Sad-iron.....	Mar. 25, 1873	779	257	3	337
141, 054	Same..... same.....	July 22, 1873	653	220	4	90
	Hubbs, J. A. (See Parker, J., assignor.)					
145, 420	Huber, B., Boston, Mass. Lithographic-press.....	Dec. 9, 1873	343	114	4	625
145, 106	Huber, G. W., and A. E. Flickinger, Norwalk, Ohio. Bench-plane.....	Dec. 2, 1873	61	20	4	590
141, 275	Huber, S., Danville, Pa. Railway-rail chair.....	July 29, 1873	877	287	4	115
136, 600	Hubing, C., Philadelphia, Pa. Water and beer cooler.....	Mar. 11, 1873	235	80	3	273
135, 037	Hübner, R., New York, N. Y. Machine for turning wooden heels.....	Jan. 21, 1873	509	164	3	76
135, 038	Same..... Machine for finishing wooden heels for shoes.....	Jan. 21, 1873	510	{ 164 } { 165 }	{ 3 }	76
134, 603	Huch, E. H., Brunswick, Germany. Coffee-pot.....	Jan. 7, 1873	99	32	3	15
139, 315	Hucks, J. G., San Francisco, Cal. Medical compound or ointment.....	May 27, 1873	788		3	592
135, 556	Hudner, F., and J. R. Little, New York, N. Y. Ice-crusher.....	Feb. 4, 1873	150	48	3	139
5, 520	Hudnut, T., Terre Haute, Ind. Hominy-mill..... (Reissue)...	Aug. 5, 1873	185	59	4	150
145, 107	Hudson, A. J., Camden, Tenn. Churn-dasher.....	Dec. 2, 1873	62	20	4	590
137, 551	Hudson, C. H., Clinton, Mass. Loom shuttle-guard.....	Apr. 8, 1873	255	78	3	389
	Hudson, H. (See Gibbs, L., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 504	Hudson, J. C. (See Odell & Hudson.)					
138, 402	Hudson, J. F., East Cambridge, Mass. Railway-car basket	July 1, 1873	138	47	4	19
142, 020	Hudson, J. L., Cumming, Ga. Wagon-standard	Apr. 29, 1873	1,050	331	3	484
140, 137	Same. Railway-rail joint	Aug. 19, 1873	560	185	4	198
136, 729	Hudson, W. S., Paterson, N. J. Locomotive	June 24, 1873	658	267	3	693
135, 222	Huerne, P., San Francisco, Cal. Filter	Mar. 11, 1873	342	113	3	282
	Huettemann, F. (See Cramer, A., assignor.)	Jan. 28, 1873	684	220	3	203
	Hufeland, P. (See Schrag & Hufeland) (Reissue.)					
136, 122	Hufeland P., New York, N. Y. Lead-pencil	Feb. 18, 1873	671	219	3	205
142, 631	Huff, D. L., Bay City, Mich. Clothes-reef	Sept. 9, 1873	279	92	4	276
	Huff, J. J. (See Huff, L. C., assignor.)					
140, 417	Huff, L. C., assignor of one-half interest to J. J. Huff, Sonina, Ala. Protecting mask for bee-keepers	July 1, 1873	64	23	4	13
136, 061	Huffer, A., assignor to M. H. Merriman, Rochester, N. Y. Blind-hinge	Feb. 18, 1873	617	203	3	202
138, 403	Huffman, J. D., assignor of one-half interest to C. M. Thompson, London, Ohio. Broadcast-seeder	Apr. 29, 1873	1,050	331	3	484
140, 273	Huffman, O., Lucieville, Nebr. Portable fence	June 24, 1873	771	243	3	703
142, 235	Huffman, W., Millgrove, Ind. Railway-rail chair	Aug. 26, 1873	767	252	4	224
135, 557	Huffman, W. C., Toledo, Ohio. Combined seat and desk for railway-cars	Feb. 4, 1873	151	48	3	139
142, 396	Hug, D., New York, N. Y., assignor to self and W. H. Speer, Jersey City, N. J. Breech-loading fire-arm	Sept. 2, 1873	68	22	4	248
136, 162	Hugg, J. S., Camden, N. J., and J. T. Stewart, assignors to J. T. Stewart, Philadelphia, Pa. Ruffler for sewing-machines	Feb. 25, 1873	724	234	3	222
138, 499	Huggett, J., Eastbourne, and J. A. Huggett, Clapham, England. Roll for rolling iron for horseshoe-nails	May 6, 1873	26	9	3	500
	Huggett, J. A. (See Huggett, J. & J. A.)					
145, 421	Huggins, J., Birmingham, England. Machine for making metallic tubing	Dec. 9, 1873	344	115	4	625
146, 003	Huggins, R. I., Bethel, Ohio. Mole-trap	Dec. 30, 1873	892	289	4	704
144, 457	Hughes, A., Brompton Ash, England. Lifting-finger for harvesters	Nov. 11, 1873	247	83	4	510
142, 340	Hughes, A. E., Louisville, Ky., assignor of one-eighth interest to E. Ford, New Albany, Ind. Chemical fire-extinguisher	Sept. 2, 1873	16	6	4	243
140, 505	Hughes, D. W., Mexico, Mo. Sulky-plow	July 1, 1873	139	48	4	19
138, 651	Hughes, H., assignor of one-third interest to W. S. Kellogg, Pekin, Ill. Brick-machine	May 6, 1873	161	52	3	511
5, 628	Hughes, J., Newark, N. J. Harness-pad (Reissue)	Oct. 28, 1873	737	246	4	468
5, 629	Same. same (Reissue)	Oct. 28, 1873	738	246	4	469
5, 541	Hughes, J., New Berne, N. C. Dumping-car (Reissue)	Aug. 19, 1873	619	204	4	202
140, 779	Same. same	July 15, 1873	389	134	4	59
142, 021	Same. same	Aug. 19, 1873	560	185	4	198
142, 851	Hughes, J., Scranton, Pa. Locomotive smoke-stack	Sept. 16, 1873	474	161	4	303
144, 275	Same. Spark-arrester	Nov. 4, 1873	88	29	4	485
138, 332	Hughes, J. M., and A. J. Mapes, Independence, Mo. Corn-crib	Apr. 29, 1873	994	313	3	479
136, 244	Hughes, M. J., New York, N. Y. Stereotype-block holder	Feb. 25, 1873	787	255	3	227
145, 179	Same. Blocking stereotype plates in casting	Dec. 2, 1873	132	43	4	596
139, 716	Hughes, R. J., Rynear, Ind. Railway-crossing	June 10, 1873	259	81	3	645
135, 711	Hughes, S., Jersey City Heights, N. J. Lantern	Feb. 11, 1873	305	97	3	164
	Hughes, T. E. (See Townsend, Hughes & Keith.)					
	Hughes, W. H. (See Latta & Hughes.)					
5, 602	Hughes, W. L. B., et al. (See Class, W. F., assignor.)					
	Hughes, W. W., Philadelphia, Pa. Malt-dryer (Reissue)	Oct. 14, 1873	326	108	4	415
144, 204	Hughes, A. C., et al. (See Thomas, O. F., assignor.)					
144, 205	Hugou, J. E., Richmond, Ind. Governor for steam-engines	Nov. 4, 1873	32	9	4	480
5, 559	Same. Governor	Nov. 4, 1873	33	9	4	480
137, 682	Hugunin, R. B., New York, N. Y. Sash-holder (Reissue)	Sept. 2, 1873	202	65	4	258
137, 552	Same. Sash-holder	Apr. 8, 1873	367	114	3	398
137, 206	Hulbert, E. J., and A. N. N. Aubin, Portland, Me. Elevated arch railway	Apr. 8, 1873	256	78, 79	3	389
	Hulet, F., Berea, Ohio. Washing-machine	Mar. 25, 1873	779	257	3	337
	Hulett, T., et al. (See Borden, T., assignor.)					
134, 807	Hulings, M., Emlenton, and W. J. Innis, Oil City, Pa. Hanger for walking-beams for oil-wells	Jan. 4, 1873	293	94	3	44
139, 467	Hull, A. C., Saint Louis, Mo., and J. S. Brown, Mount Pleasant, D. C., assignors of one-third interest to I. H. Sturgeon, Saint Louis, Mo. Nut-lock	June 3, 1873	21	7	3	610
5, 651	Hull, D. C., Westfield, Mass. Manufacture of whip-stocks (Reissue)	Nov. 11, 1873	365	123	4	519
135, 476	Hull, F. A., Beloit, Wis. Device for burning petroleum	Feb. 4, 1873	78	24	3	133
142, 106	Hull, L., Charlestown, assignor to Tucker Manufacturing Company, Boston, Mass. Lamp-bracket	Aug. 26, 1873	660	216	4	215
142, 107	Same. Extension chandelier	Aug. 26, 1873	660	217	4	215
143, 765	Hull, L., Charlestown, Mass. Gasalier extension	Oct. 21, 1873	360	119	4	428
	Hull, T. (See Thomas, N., assignor.)					
143, 764	Hull, W., Fort Wayne, Ind. Gate-hinge	Oct. 21, 1873	359	119	4	428
142, 236	Hulse, A. C., Palmyra, Ill. Pruning-knife	Aug. 26, 1873	768	252	4	224
142, 915	Hulse, A. C., and J. S. Crum, Palmyra, Ill. Pruning implement	Sept. 16, 1873	525	179	4	507
	Hulse, W. M. (See King & Hulse.)					
136, 518	Humans, W., Cambridge, Mass. Electro-magnetic annunciator	Mar. 4, 1873	149	48	3	257
141, 716	Hume, G. H., assignor to L. C. Crittenden, G. H. Hume, and C. W. Carr, Paola, Kans. Tree-protector	Aug. 12, 1873	281	92	4	166
140, 506	Hummel, J. F., Cincinnati, Ohio. Combined wall-protector and towel-rack	July 1, 1873	140	48	4	20
142, 467	Hummer, H. A., Frenchtown, N. J. Cooking-stove	Sept. 2, 1873	131	43	4	253
136, 062	Humphrey, A. M., Broadhead, Wis. Gang-plow	Feb. 18, 1873	618	203	3	202
	Humphrey, D. H. (See Humphrey, W. H., assignor.)					
137, 137	Humphrey, G. W., Pompey, N. Y., assignor to self and J. M. Taylor, New York, N. Y. Encasing caustic alkali	Mar. 25, 1873	714	237	3	332
141, 055	Humphrey, R., Unionville, Conn. Die for punching washers	July 22, 1873	654	220	4	90
142, 698	Humphrey, W. H., assignor to W. H. and D. H. Humphrey, Lansingburgh, N. Y. Journal-packing rack	Sept. 9, 1873	535	112	4	281
134, 991	Humphreys, J. W., La Fayette, Ind. Ditching-machine	Jan. 21, 1873	463	148	3	72
145, 736	Humphreys, J. W., Oxford, Ind. Ditching-machine	Dec. 23, 1873	641	209	4	673
	Humphries, J., & Sons. (See Smith, H., assignor.) (Design.)					
6, 522	Humphries, J., Kidderminster, England. Carpet (Design)	Mar. 25, 1873			3	325
136, 835	Hungerford, E. B., Corning, N. Y. Mold for making glass-blind slats	Mar. 18, 1873	444	147	3	299
142, 468	Hungerford, F., Rochester, assignor to A. C. Stearns, Corning, N. Y. Oil-burning boiler-furnace	Sept. 2, 1873	132	43	4	253
138, 890	Hunsinger, F., Morrisania, N. Y. Axle and axle-box for vehicles	May 13, 1873	386	121	3	539
135, 339	Hunt, C. D., Fairhaven, Mass. Metal-coating tacks, nails, &c	Jan. 28, 1873	791		3	111

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 706	Hunt, C. F., Brooklyn, N. Y., assignor to self and E. P. Emmeluth, Mount Vernon, N. Y. Cork-extractor	July 8, 1873	325	110	4	46
136, 652	Hunt, D. M., Southampton Mills, Pa. Hand-car	Mar. 11, 1873	279	93	3	277
135, 340	Hunt, F. B., assignor to E. R. and W. N. Matthews, Richmond, Ind. Screw-driver	Jan. 28, 1873	792	256	3	111
137, 000	Hunt, F. R., Leavenworth, Kans. Package band and fastener	Mar. 18, 1873	581	193	3	310
142, 469	Hunt, F. W., East Orange, N. J. Refrigerator	Sept. 2, 1873	133	43	4	253
137, 683	Hunt, G., Wawayanda, N. J. Barrel-cover	Apr. 8, 1873	368	114	3	398
137, 774	Hunt, G., New York, N. Y. Broom-protector	Apr. 15, 1873	463	145	3	419
142, 789	Hunt, G., Chicago, Ill. Reversible pinion for watches	Sept. 16, 1873	426	144	4	298
139, 156	Hunt, G. A., Newburgh, N. Y. Printing-press	May 20, 1873	635	198	3	572
136, 163	Hunt, G. S., Sacramento, Cal. Anti-friction metal	Feb. 25, 1873	725	.....	3	222
142, 470	Hunt, J., assignor of one-half interest to J. Foulke, Richmond, Ind. Vise	Sept. 2, 1873	134	44	4	253
142, 237	Hunt, J. C., Sioux City, Iowa. Apparatus for steaming grain	Aug. 26, 1873	768	253	4	224
138, 652	Hunt, L., Buffalo, N. Y., assignor of one-half interest to M. M. Drake. Steering-apparatus for vessels	May 6, 1873	162	52	3	511
138, 252	Hunt, M. A., Cincinnati, Ohio. Bed-bottom	Apr. 29, 1873	920	290	3	474
137, 207	Hunter, A., and C. E. Whitmore, Quincy, Ill. Middlings-purifier	Mar. 25, 1873	780	{ 257 258 }	{ 3 3 }	337
137, 449	Same..... Middlings receiver, cooler, and duster	Apr. 1, 1873	151	49	3	369
142, 022	Same..... Middlings-purifier	Aug. 19, 1873	561	186	4	198
142, 023	Same..... same	Aug. 19, 1873	562	186	4	198
144, 392	Hunter, B., Philadelphia, Pa. Grave-mound cover	Nov. 11, 1873	194	66	4	506
138, 253	Hunter, C. D., et al. (See Springer, W. A., assignor.)					
140, 828	Hunter, C. D., and E. S. Woods, Marlborough, Mass. Inhaler	Apr. 29, 1873	921	290	3	474
141, 646	Same..... same	July 15, 1873	434	148	4	63
137, 001	Hunter, D. J., assignor to I. Ames, Boston, Mass. Brick-machine	Aug. 12, 1873	221	70	4	161
139, 316	Hunter, E., Norwich, Conn. Snow-shovel	Mar. 18, 1873	582	194	3	310
143, 766	Hunter, E., and D. Van Sickle, Chicago, Ill. Wardrobe bedstead	May 27, 1873	789	251	3	592
145, 348	Hunter, G. J. (See Davis, D. P., assignor.) (Reissue.)					
143, 766	Hunter, G. W., assignor of part interest to W. F. Stone, H. M. Baker, and J. H. Vermilye, Washington, D. C. Sewing-machine	Oct. 21, 1873	361	120	4	428
145, 348	Hunter, G. W., assignor of part interest to H. M. Baker, W. F. Stone, J. H. Vermilye, and G. H. Platt, Washington, D. C. Shuttle for sewing-machines	Dec. 9, 1873	282	94	4	620
141, 056	Hunter, H. J., and J. Rice, Scioto, Ohio. Truss-bridge	July 22, 1873	654	221	4	90
138, 752	Hunter, J., and H. M. Clayton, Ashland, Pa. Bag-holder	May 13, 1873	267	82	3	529
136, 245	Hunter, J. T., and D. L. H. Mitchell, Forest, Miss. Plow	Feb. 25, 1873	788	255	3	227
142, 790	Hunter, O. D., Plymouth, Conn. Core for casting metals	Sept. 16, 1873	426	.....	4	299
138, 891	Hunter, R. F., Staunton, Va., assignor to self and A. F. Randall, assignors in part to T. Hood and O. F. Presbrey, Washington, D. C. Revenue-stamp	May 13, 1873	386	121	3	539
134, 749	Hunter, S. B., et al. (See Hinman, W. W., assignor.)					
134, 749	Hunter, W. S., Stanstead, Canada. Railway-rail	Jan. 14, 1873	241	78	3	40
143, 626	Huntington, F. A. (See Swingle, A., assignor.)					
143, 627	Same..... (See Swingle & Huntington.)					
137, 002	Huntington, F. A., San Francisco, Cal. Divided-nut device for feed-screws	Oct. 14, 1873	211	71	4	406
137, 003	Huntington, G. S. (See Morton, J., assignor.)					
143, 906	Huntington, M. H., Watertown, N. Y. Cosmetic-bottle	Oct. 14, 1873	212	71	4	406
137, 002	Huntington, S. S. (See Warriner, F., assignor.)					
137, 003	Huntington, T. S., Baltimore, Md. Gathering-attachments for sewing-machines	Mar. 18, 1873	583	194	3	310
143, 906	Same..... Ruffling-attachments for sewing-machines	Mar. 18, 1873	583	194	3	310
142, 852	Huntley, A. D., Smyrna Mills, assignor of one-half interest to B. F. Nickerson, New Limerick, Me. Reciprocating-churn	Oct. 21, 1873	479	161	4	437
144, 676	Huntley, G. R., assignor to self and C. E. Hait, Hubbardstown, Mich. Neck-yoke holder	Sept. 16, 1873	475	162	4	303
143, 014	Huntley, H. H., assignor to Comstock, Castle & Co., Quincy, Ill.	Nov. 18, 1873	439	148	4	537
135, 810	Huntley, W. W., assignor to W. W. Huntley, A. P. Holcomb, and A. Heine, Silver Creek, N. Y. Screen for middlings-purifiers	Sept. 23, 1873	617	210	4	325
135, 811	Huntley, W. W., and A. P. Holcomb, Silver Creek, N. Y. Middlings-purifier	Feb. 11, 1873	395	{ 127 128 }	{ 3 3 }	170
135, 811	Same..... Process of purifying middlings	Feb. 11, 1873	396	.....	3	170
135, 223	Huntoon, E. C. (See Huntoon, L., assignor.)					
136, 921	Huntoon, H. P. (See Brown, J. R., assignor.)					
138, 892	Huntoon, L., assignor to self and E. C. Huntoon, Natick, Mass. Compound steam-engine	Jan. 28, 1873	684	221	3	203
145, 949	Hunziker, G., Summit, Miss. Distilling-apparatus	Mar. 18, 1873	515	170	3	305
5, 454	Hunzinger, G., New York, N. Y. Folding-chair	May 13, 1873	387	121	3	539
135, 119	Hurd, C. T., Victoria, Tex. Insect-destroying attachment for cultivators	Dec. 30, 1873	848	276	4	700
139, 393	Hurd, J. M., Auburn, N. Y. Bag-machine	June 17, 1873	622	195	3	682
140, 198	Hurlbut, R. H. (See Moore & Hurlbut.)					
142, 853	Hurley, J. C., Cincinnati, Ohio. Wheel for vehicles	Jan. 21, 1873	570	186	3	81
140, 579	Hurst, C., Philadelphia, Pa. Stereotype-plate holder	May 27, 1873	854	273	3	598
140, 580	Hurst, G. W., Avon, Ohio. Reversible harrow-teeth	June 24, 1873	710	223	3	697
143, 826	Hussey, I., Ironton, Ohio. Brush washboard and roller	Sept. 16, 1873	475	162	4	303
143, 812	Huston, G. M., Zanesville, Ohio. Egg-carrier	July 8, 1873	217	73	4	37
143, 813	Same..... same	July 8, 1873	218	73	4	37
143, 814	Hutchins, C., assignor to self and A. Large, Aubrey, Kans. Corn-planter	Oct. 21, 1873	411	137	4	432
143, 815	Hutchins, J., Portsmouth, Ohio. Combined mill-stone tram and level	Feb. 11, 1873	397	128	3	170
143, 816	Hutchinson, C. H., Concord, N. H. Balanced slide-valve	Nov. 11, 1873	248	84	4	510
143, 817	Hutchinson, E., New York, N. Y. Bird-cage	Nov. 25, 1873	642	219	4	564
143, 818	Hutchinson, E. L., Auburn, N. Y. Corn-sheller	Aug. 5, 1873	130	41	4	146
134, 890	Hutchinson, H. M. (See Morrison & Hutchinson.)					
142, 471	Hutchinson, H. R., Empire Iron Works, Ky. Lubricating compound	Jan. 14, 1873	364	.....	3	49
6, 343	Hutchinson, R. A., Bergen, N. J. Grate-bar	Sept. 2, 1873	135	44	4	253
6, 344	Hutchison, J., Newark, N. J., assignor to T. Potter, Sons & Co., Philadelphia, Pa. Oil-cloth	Jan. 21, 1873	.....	.....	3	70
6, 345	Same..... same	Jan. 21, 1873	.....	.....	3	70
6, 346	Same..... same	Jan. 21, 1873	.....	.....	3	70
6, 347	Same..... same	Jan. 21, 1873	.....	.....	3	70
6, 812	Same..... same	Jan. 21, 1873	.....	.....	3	70
6, 813	Same..... same	Aug. 19, 1873	.....	.....	4	185
6, 814	Same..... same	Aug. 19, 1873	.....	.....	4	185
6, 815	Same..... same	Aug. 19, 1873	.....	.....	4	185
6, 816	Same..... same	Aug. 19, 1873	.....	.....	4	185
6, 817	Same..... same	Aug. 19, 1873	.....	.....	4	185
8, 818	Same..... same	Aug. 19, 1873	.....	.....	4	185
	Hutchison, J. A. (See Rogers, C., assignor.)					
	Hutchison, J. G., et al. (See Grotz, C., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 418	Hutton, D. W. J., <i>et al.</i> (See Johnson, G. F., assignor.)	July 1, 1873	64	23	4	13
	Hutton, R., Holyoke, Mass. Belt-guide for paper-machines					
135, 918	Hyatt, E. A. L. (See Hyatt, T., assignor.)					
	Hyatt, I. S. & J. W., Albany, N. Y. Toilet-comb	Feb. 18, 1873	497	162	3	192
	Hyatt, J. W. (See Hyatt, I. S. & J. W.)					
138, 254	Hyatt, J. W., Albany, N. Y. Manufacturing pyroxyline articles	Apr. 29, 1873	922	291	3	474
6, 957	Hyatt, L. L., New Brunswick, N. J. Rubber boot (Design)	Oct. 14, 1873			4	401
140, 829	Hyatt, L. L., and J. H. Canfield, New Brunswick, N. J. Rubber shoes	July 15, 1873	435	148	4	63
135, 120	Hyatt, T., New York, N. Y. Vault-light	Jan. 21, 1873	571	186	3	81
136, 519	Same..... Vault-cover	Mar. 4, 1873	150	48	3	257
140, 707	Same..... Ridge and furrow sidewalk-plate	July 8, 1873	325	110	4	46
140, 708	Hyatt, T., Atchison, Kans. Ridge and furrow sidewalk-plate	July 8, 1873	326	110	4	46
140, 709	Same..... Illuminating vault-cover	July 8, 1873	326	111	4	46
142, 472	Hyatt, T., New York, N. Y. Illuminating-roofing	Sept. 2, 1873	136	44	4	253
142, 473	Same..... same	Sept. 2, 1873	136	44	4	253
142, 474	Same..... Wall for buildings	Sept. 2, 1873	137	45	4	253
142, 475	Same..... Building-block	Sept. 2, 1873	137	45	4	253
142, 476	Same..... Fire-proof safe	Sept. 2, 1873	138	45	4	253
143, 156	Same..... Fire-proof shutter	Sept. 23, 1873	727	250	4	334
143, 157	Same..... same	Sept. 23, 1873	728	251	4	334
145, 180	Same..... Fire-proof column	Dec. 2, 1873	133	43	4	596
145, 181	Same..... Fire-proof floor and roof	Dec. 2, 1873	134	44	4	596
145, 182	Same..... Fire-proof illuminating-tile	Dec. 2, 1873	135	44	4	596
145, 183	Hyatt, T., assignor to E. A. L. Hyatt, New York, N. Y. Illuminating-door	Dec. 2, 1873	136	44	4	596
145, 184	Same..... Metallic hatchway-door	Dec. 2, 1873	136	44, 45	4	596
145, 185	Same..... Flexible sheet-metal illuminating-plate	Dec. 2, 1873	137	45	4	596
145, 186	Same..... Ventilating illuminating roofing-plate	Dec. 2, 1873	137	45	4	596
145, 187	Same..... Illuminating vault-cover	Dec. 2, 1873	138	45	4	596
145, 188	Same..... same	Dec. 2, 1873	139	46	4	596
145, 189	Same..... same	Dec. 2, 1873	139	46	4	596
145, 190	Same..... same	Dec. 2, 1873	140	46	4	596
145, 191	Same..... same	Dec. 2, 1873	141	46	4	596
145, 192	Same..... same	Dec. 2, 1873	141	47	4	596
145, 193	Same..... same	Dec. 2, 1873	142	47	4	597
145, 194	Same..... same	Dec. 2, 1873	143	47	4	597
145, 195	Same..... same	Dec. 2, 1873	143	47	4	597
145, 196	Same..... same	Dec. 2, 1873	144	48	4	597
145, 197	Same..... same	Dec. 2, 1873	145	48	4	597
145, 198	Same..... same	Dec. 2, 1873	145	48	4	597
145, 199	Same..... same	Dec. 2, 1873	146	48, 49	4	597
145, 200	Same..... same	Dec. 2, 1873	147	49	4	597
145, 201	Same..... same	Dec. 2, 1873	147	49, 50	4	597
145, 202	Same..... same	Dec. 2, 1873	148	50	4	597
145, 203	Same..... Non-condensing illuminating vault-cover	Dec. 2, 1873	148	50	4	597
145, 204	Same..... same	Dec. 2, 1873	149	50	4	597
145, 205	Same..... same	Dec. 2, 1873	149	51	4	597
145, 206	Same..... same	Dec. 2, 1873	150	51	4	597
145, 207	Same..... Elevating vault-cover	Dec. 2, 1873	151	51	4	597
145, 208	Same..... Flexible illuminating vault-plate	Dec. 2, 1873	152	52	4	597
145, 209	Same..... Illuminating ventilating step	Dec. 2, 1873	152	52	4	597
140, 419	Hyde, A., assignor of one-half interest to J. W. Trafton, Springfield, Mass. Belt-fastener	July 1, 1873	65	23	4	13
590	Hyde, I., Oakland, assignor to O. J. Backus, San Francisco, Cal. Combined water-wheel and sewing-machine (Reissue)	Oct. 7, 1873	145	48	4	392
143, 907	Hyde, J. P., New York, N. Y. Stench-trap	Oct. 21, 1873	480	161	4	437
136, 730	Hyde, J. R., Troy, N. Y. Reservoir cooking-stove	Mar. 11, 1873	343	{ 113 114 }	{ 3 3 }	282
140, 044	Same..... Cooking-stove	June 17, 1873	554	175	3	677
138, 404	Hyde, O., Oakland, Cal. Traction-wheel	Apr. 29, 1873	1,051	331	3	484
136, 653	Hyman, J., assignor to self and S. Sherrerd, Belvidere, N. J. Attachment to carpenters' squares	Mar. 11, 1873	280	94	3	277
	Hynes, M. T. (See Connor & Hynes.)					
	Hyslop, T. (See Snyder, F. H., assignor.)					
144, 981	Iddings, H. A. (See West, I. M., assignor.)					
	Ide, A. L., Springfield, Ill. Steam-radiator	Nov. 25, 1873	704	238	4	570
	Iden, H., <i>et al.</i> (See Clough, T., assignor.)					
136, 731	Idly, G. C., Burlingame, Kans. Door-check	Mar. 11, 1873	345	114	3	282
6, 989	Illeburg, H., assignor to D. W. Bruce, New York, N. Y. Printing-type (Design)	Nov. 11, 1873			4	504
6, 990	Same..... same (Design)	Nov. 11, 1873			4	504
141, 337	Illfelder, J., New York, N. Y. Combined lead-pencil and rubber-eraser	Nov. 4, 1873	137	46	4	489
	Illinois Manufacturing Company. (See Cross, J. E., assignor.)					
7, 069	Ilisley, S. A., Brooklyn, N. Y. Canister for tea, coffee, &c. (Design)	Dec. 23, 1873			4	671
7, 070	Same..... same (Design)	Dec. 23, 1873			4	671
	Imbs, J. F. (See Bleckman, F., assignor.)					
	Imhof, H. (See Payne & Imhof.)					
137, 925	Imhof, H., Lockport, N. Y. Table-leaf support	Apr. 15, 1873	588	185	3	429
144, 543	Imlay, W. L., Philadelphia, Pa. Apparatus for the manufacture of hydrogen-gas	Nov. 11, 1873	322	109	4	516
	Imperial Meter Company. (See De Castro & Burton, assignors.)					
	Same..... (See Telling & Johnson, assignors.)					
146, 074	India Rubber Comb Company. (See Ropes, D. N., assignor.)					
135, 813	Ingalls, J. K., Starkey, N. Y. Illuminating vault-cover	Dec. 30, 1873	953	308	4	709
	Ingels, J. and W. R. Mount, assignors to Hoosier Drill Company, Milton, Ind. Corn-planter	Feb. 11, 1873	298	128	3	170
	Ingersoll, A. M., <i>et al.</i> (See Quarterman, J., assignor.)					
144, 982	Ingersoll, P. C., Green Point, N. Y. Hand-power baling-press	Nov. 25, 1873	705	238	4	570
140, 830	Ingersoll, S., Stamford, Conn. Hose-coupling	July 15, 1873	436	148	4	63
	Ingham, J. (See Firth & Ingham)					
141, 142	Ingham, J. C. and C. Colby, Benton Harbor, Michigan. Cover for fruit-baskets	July 22, 1873	736	244	4	96
143, 158	Ingham, S. D., Ripley, Ohio. Meat-mangle	Sept. 23, 1873	729	251	4	334
6, 628	Ingraham, E., Bristol, Conn. Clock-front (Design)	May 6, 1873			3	497
140, 138	Ingraham, H., Naples, N. Y. Base-burning cooking-stove	June 24, 1873	658	207	3	693
143, 908	Ingram, D. D., Manistee, Mich. Pipe-wrench	Oct. 21, 1873	481	162	4	437
136, 164	Inman, C., Hope, Mich. Rotary steam-engine	Feb. 25, 1873	726	234	3	222
142, 699	Inman, E., Eaton, Ind. Sawing-machine	Sept. 9, 1873	336	113	4	281
135, 224	Inman, S., assignor of one-half interest to H. P. Stockton, Rockford, Ill. Feed-roll for planing-machines	Jan. 28, 1873	686	221	3	203

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 558	Innis, J. W., Newburgh, N. Y. Potato-digger	Feb. 4, 1873	152	49	3	139
	Innis, W. J. (See Hulings & Innis.)					
142, 570	Innis, W. J., Oil City, Pa. Wrench	Sept. 9, 1873	231	75	4	272
	Inslee, J. H. P. (See Tarbell & Inslee.)					
	Insley, M. H. (See Blunt, J. G., assignor)					
142, 854	Insull, T. and J. F. Dovey, Philadelphia, Pa. Machine for cutting carriage lock-plate blanks	Sept. 16, 1873	476	162	4	303
138, 160	Irland, D. H., Hudson, Mich. Gas-generator	Apr. 22, 1873	808	257	3	456
	Irons, A. A., et al. (See Miller, H., assignor.)					
7, 062	Irons, J., Philadelphia, Pa. Show-case	Dec. 16, 1873			4	641
142, 632	Irvine, J., Parkersburgh, Iowa. Harvester-rake	Sept. 9, 1873	280	92	4	276
143, 909	Irving, C. L., Indianapolis, Ind. Combined brake and starter for street-cars	Oct. 21, 1873	481	162	4	437
140, 045	Irving, T. J., Baltimore, Md. Suspenders	June 17, 1873	555	175	3	677
136, 520	Irwin, D. J., Noble, Ill. Brick-machine	Mar. 4, 1873	151	48	3	257
141, 560	Irwin, D. J. and H. S. Langdon, Noble, Ill. Brick-machine	Aug. 5, 1873	131	41	4	146
	Irwin, G. M., et al. (See Gearing, C., assignor.)					
140, 710	Irwin, G. W. and T. A. Cox, Champaign County, Ill. Coupling for earth-auger shafts ..	July 8, 1873	327	111	4	46
137, 684	Irwin, H. M., Davidson College, N. C. Horse-power	Apr. 8, 1873	368	114	3	398
138, 653	Irwin, J. H., Philadelphia, Pa. Lamp	May 6, 1873	163	52	3	511
138, 654	Same	May 6, 1873	165	53	3	511
142, 791	Irwin, J. N., Pittsburgh, Pa. Fire-place	Sept. 16, 1873	427	144	4	299
147, 553	Isbell, C. W., New York, N. Y. Piston-blower	Apr. 8, 1873	257	79	3	389
142, 700	Same	Sept. 9, 1873	337	113	4	281
148, 655	Isbell, J. L., Naugatuck, Conn. Hoisting-apparatus	May 6, 1873	166	53	3	511
5, 694	Isbell, R. H., New Milford, Conn. Process of preparing wood for the manufacture of buttons	Dec. 23, 1873	806		4	686
	Isburgh, C. H. (See Renton, G., assignor.)					
136, 521	Isham, G. B., Burlington, Vt. Portable stove	Mar. 4, 1873	152	49	3	257
138, 805	Same	May 13, 1873	311	96	3	533
138, 893	Isherwood, T. and W. Nuttall, Westerly, R. I. Stop-mechanism for looms	May 13, 1873	388	121	3	539
138, 894	Isidor, M., New York, N. Y. Ear-protector	May 13, 1873	389	122	3	539
136, 601	Iske, A., Lancaster, Pa. Compound implements	Mar. 11, 1873	235	80	3	273
137, 371	Iske, A., assignor to M. L. Herr, Lancaster, Pa. Extension-trough for wagons	Apr. 1, 1873	83	27	3	364
144, 206	Iske, A., Lancaster, Pa. Machine for slicing dried-beef	Nov. 4, 1873	33	10	4	481
145, 803	Iskian, G., New York, N. Y. Carpet	Dec. 23, 1873	695	228	4	678
140, 139	Israel, J. P. and D. W. McLane, Oil City, Pa. Door check	June 24, 1873	659	207	3	693
	Ives, E. R., et al. (See Krinks, J. S., assignor.)					
135, 276	Ives, G. L., Rome, N. Y. Combined horse-rake and tedder	Jan. 28, 1873	734	236	3	107
	Ives, J. A. and Brother. (See Bowers, J., assignor.)					
144, 544	Ives, J. S., New York, N. Y. Process of removing ink from engraved printing-plates ..	Nov. 11, 1873	323		4	516
5, 455	Ives, W. A., New Haven, Conn. Machine for forming auger-bits	June 17, 1873	623	196	3	682
145, 422	Ives, W. J., Meriden, Conn. Bow-pin for ox-yoke	Dec. 9, 1873	345	115	4	625
144, 849	Jack, E. N., Williamsburgh, Ohio. Wagon-brake	Nov. 25, 1873	600	204	4	560
	Jack, R. M. (See Kline & Jack.)					
	Jackson, A. C. (See Jackson, T. R. and A. C.)					
	Same					
140, 371	Jackson, A. F., Minneapolis, Minn. Spike-extractor	July 1, 1873	31	10	4	10
	Jackson, A. T. (See Beddow & Jackson.)					
144, 459	Jackson, E. A., New York, N. Y. Fire-place front	Nov. 11, 1873	250	84	4	510
144, 460	Same	Nov. 11, 1873	250	84	4	510
143, 244	Jackson, J., assignor of one-half interest to G. Rohrmayer, Hartford, Conn. Apparatus for checking horses	Sept. 30, 1873	810	278	4	356
138, 806	Jackson, L. G., Marion, assignor of one-half interest to C. Wood and A. Ellis, Woodman, Wis. Combined harrow and seeder	May 13, 1873	311	96	3	533
135, 477	Jackson, M., Bavington, Pa. Adjustable journal	Feb. 4, 1873	79	25	3	133
6, 348	Jackson, P. H., New York, N. Y. Lamp-post	Jan. 21, 1873			3	70
134, 549	Same	Jan. 7, 1873	42	13, 14	3	10
	Jackson, R. (See Lidren, C., assignor.)					
143, 015	Jackson, R., Philadelphia, Pa. Fan attachment for sewing-machines	Sept. 23, 1873	618	210	4	325
135, 646	Jackson, R. A., Pittsburgh, Pa., assignor to I. Charles, Allegheny Pa., and J. J. Johnston, Columbiana, Ohio, said Johnston assignor to W. D. Rinehart, Allegheny, Pa. Process for converting cast-iron articles into steel		248		3	159
	Jackson, T. M. (See Weston, J. W., assignor.)					
143, 349	Jackson, T. R., Dallas, Tex. Cotton-press	Sept. 30, 1873	906	308	4	364
139, 007	Jackson, T. R. and A. C., Sabine Pass, Tex. Windmill	May 20, 1873	495	156	3	561
139, 157	Jackson, T. R. and A. C., and C. S. Watson, Sabine Pass, Tex. Jack-screw and clamp combined	May 20, 1873	637	198	3	572
138, 895	Jackson, W. B., and J. M. and O. J. Childs, Utica, N. Y. Plow	May 13, 1873	389	122	3	539
	Jackson, W. H. (See Howard & Jackson.)					
142, 397	Jackson, W. M., Woodland, Cal. Heater and blower	Sept. 2, 1873	69	23	4	248
	Jacobs, F. A. (See Jacobs, W. E. and F. A.)					
	Jacobs, J. (See Turner & Jacobs.)					
142, 633	Jacobs, M. E., Winnebago, Ill. Tire-tightener	Sept. 9, 1873	281	92	4	276
143, 511	Jacobs, W. E., Columbus, Ohio. Wheel for wheelbarrows	Oct. 7, 1873	95	33	4	388
143, 016	Jacobs, W. E. and F. A., Columbus, Ohio. Scraper	Sept. 23, 1873	619	210	4	325
138, 255	Jacobsen, C. F., New York, N. Y. Reflector	Apr. 29, 1873	923	291	3	474
139, 394	Jacobsen, C. F., and A. Berger, said Berger assignor to said Jacobsen, New York, N. Y. Street-lamp	May 27, 1873	855	{ 273 } { 274 }	3	598
143, 577	Jacoby, W. H., Minneapolis, Minn. Photographic printing-frame	Oct. 14, 1873	168	56, 57	4	403
135, 559	Jacot, C. E., Chaux de Fonds, Switzerland, Winding and setting watches	Feb. 4, 1873	153	49	3	139
136, 246	Jaeger, G. L., New York, N. Y. Machine for making paper boxes	Feb. 25, 1873	789	{ 255 } { 256 }	3	227
	Jagger, I., et al. (See Harris, S. W., assignor.)					
141, 354	Jakel, J., assignor to self and F. L. Dolunstreich, Detroit, Mich. Brewer's stocking-cask	July 29, 1873	956	311	4	121
	Jakes, J. T., et al. (See Ruth, W. A., assignor.)					
	James, A. (See Murphy, R. Y., assignor.)					
137, 080	James A., Chicago, Ill. Toy-gun	Mar. 25, 1873	667	221	3	328
142, 477	James, B. W., Philadelphia, Pa. Nasal respirator	Sept. 2, 1873	139	45	4	253
145, 874	Same	Dec. 23, 1873	756	247	4	683
139, 959	James, F. D., Tamworth, N. H. Combined collar and cravat	June 17, 1873	481	151	3	671
144, 101	James, G. W., Jersey City, N. J. Cuff-holder	Oct. 28, 1873	670	221	4	463
141, 057	James, R. C., Denison, Tex. Cane stripper	July 22, 1873	655	221	4	10
	James, W. H. (See Anderson, J., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 775	Jameson, J., Gateshead, England, assignor to H. A. Tucker, New York, N. Y. Safety-papers for bank-notes, &c.	Apr. 15, 1873	463		3	419
144, 545	Jamieson, H. A., assignor to self and G. Whitaker, Brooklyn, N. Y. Valve for direct-acting engines	Nov. 11, 1873	324	109	4	516
139, 717	Jamison, S. W., assignor to self and W. J. Dudley, Newark, N. J. Machine for crimping leather for boots and shoes.	June 10, 1873	259	82	3	646
137, 611	Janes, J. H., H. Tucker, and T. D. Terry, Knobnoster, Mo. Wheel-plow	Apr. 8, 1873	306	95	3	393
136, 063	Janke, F., Brünn, Austria. Lamp-stove	Feb. 18, 1873	619	203	3	202
134, 750	Januey, C., assignor to C. M. Hardenbergh, Minneapolis, Minn. Middlings-purifier	Jan. 14, 1873	242	78	3	40
138, 405	Janney, E. H., Alexandria, Va. Car-coupling	Apr. 29, 1873	1,052	331	3	484
139, 960	Jansen, C. (See Van Herwerden, C., assignor.)					
	Jantzen, S. C., Philadelphia, Pa. Coffee-mill	June 17, 1873	481	151	3	671
	Jaques, B. F. (See McDuffy & Jaques.)					
137, 926	Jaques, D. L., Hudson, Mich. Harrow	Apr. 15, 1873	588	185	3	429
137, 875	Jaques, J. A., Tottenham; J. T. Oakley, Bermondsey; and L. Sterne, Westminster, England. Magnetic chuck for lathes and planers	Apr. 15, 1873	545	170	3	425
145, 061	Jaquith, A. B., and J. Wolohan, assignors of one-third interest to E. A. Jaquith, Rochester, N. Y. Heel-breasting machine	Dec. 2, 1873	20	7	4	587
	Jaquith, E. A. (See Jaquith & Wolohan, assignors.)					
138, 161	Jarecki, A. H., Erie, Pa. Pipe-tongs	Apr. 22, 1873	809	257	3	456
137, 927	Jarre, A. E. & P. J., Paris, France. Breech-loading fire-arm	Apr. 15, 1873	589	186	3	429
	Jarre, P. J. (See Jarre, A. E. & P. J.)					
141, 355	Jarrell, W., Humboldt, Tenn. Cotton-scraper	July 29, 1873	957	{ 311 312 }	4	121
143, 350	Jay, P. E., Saint Jean Baptiste, Canada. Manufacture of cast-iron from ore	Sept. 30, 1873	906	.....	4	364
140, 780	Jaycox, G. B., Hartford, and A. Webster, Farmington, said Jaycox assignor of one-half interest to W. E. Simonds, Hartford, Conn. Screw-cutting machine	July 15, 1873	390	134	4	59
140, 923	Jaynor, A., Regent's Park, England. Pneumatic telegraph	July 15, 1873	521	175	4	70
140, 924	Jeançon, J. A., Newport, Ky. Electro-deposition of aluminum	July 15, 1873	523	.....	4	70
137, 081	Jebb, T. A., Buffalo, N. Y. Duplex ticket	Mar. 25, 1873	668	221	3	328
137, 208	Same.....Duplex railway-ticket	Mar. 25, 1873	782	258	3	337
137, 209	Jebb, T. A., and L. Brush, assignors to The American Duplex Ticket Company, Buffalo, N. Y. Book of railway-fare tickets	Mar. 25, 1873	783	258	3	337
	Jedkins, J. W. (See Brown & Jedkins.)					
	Same.....(See Brown & Jedkins.).....(Reissue.)					
143, 159	Jedkins, J. W., Monmouth, Me. Shutter-worker	Sept. 23, 1873	729	251	4	334
135, 225	Jeffers, R., and D. C. Bockoven, South Sodus, N. Y. Wash-boiler attachments	Jan. 28, 1873	688	221	3	103
144, 765	Jeffers, W., Pawtucket, R. I. Relief-valve for steam fire-engines	Nov. 18, 1873	515	175	4	543
135, 121	Jeffery, E. A., Jersey City. Sewing-machine table-cover	Jan. 21, 1873	572	187	3	81
142, 024	Same.....Sewing-machine table	Aug. 19, 1873	563	186	4	198
136, 836	Jefts, W., Battle Creek, Mich. Table-leaf support	Mar. 18, 1873	445	147	3	299
136, 837	Same.....Table	Mar. 18, 1873	445	148	3	299
	Jeinson Lubricator Company. (See Moulton, W. J. L., assignor.)					
143, 413	Jelliffe, C. E. L., Bayonne, N. J. Chisel	Oct. 7, 1873	16	6	4	382
5, 702	Jenckes, W., Manchester, N. H., assignor to G. Draper & Son, Hopedale, Mass. Spinning-ring	Dec. 23, 1873	816	266	4	687
	Same.....(Reissue.)					
142, 238	Jenings, S. H., Oquawka, Ill. Sewer-cleaner	Aug. 26, 1873	769	253	4	224
	Jenison Lubricator Company. (See Fay, C. T., assignor.)					
139, 961	Jenkins, C. B., New York, N. Y. Attaching metal caps to glass, porcelain, &c.	June 17, 1873	482	152	3	671
145, 349	Jenkins, C. W., New York, N. Y. Skate	Dec. 9, 1873	282	94	4	620
141, 226	Jenkins, E. W., Camden, N. J., and S. Jenkins, Landsdale, Pa. Rotary steam-engine	July 29, 1873	831	271	4	111
140, 372	Jenkins, G. E., assignor to Ogden, Milstead & Co., Philadelphia, Pa. Tassel	July 1, 1873	31	10	4	10
	Jenkins, H., deceased, by L. Jenkins. Ornamental connection of the parts of an iron fence	Mar. 3, 1873	.....	.....	3	386
	Jenkins, J., et al. (See Dewell, J. V., assignor.)					
	Jenkins, L. (See Jenkins, H.).....(Extension.)					
145, 804	Jenkins, N., Madison, assignor to self and F. O. Manchester, New Haven, Conn. Molding-machine	Dec. 23, 1873	695	228	4	678
	Jenkins, S. (See Jenkins, E. W. & S.)					
144, 102	Jenkins, S. H., et al. (See Hart, J., assignor.)					
144, 103	Jenkins, S. H., Nashville, Tenn. Railway-switch	Oct. 23, 1873	670	221	4	463
139, 158	Jenkins, W., Abergavenny, England. Cask for transporting oils, &c.	Oct. 28, 1873	671	222	4	463
144, 617	Jenkinson, G. B., Newark, N. J. Trunk	May 20, 1873	637	199	3	572
	Jenkinson, J., Brooklyn, N. Y. Skirt-protector	Nov. 18, 1873	392	131	4	533
	Jenks, B. H. (See Craven, T. C., assignor.).....(Reissue.)					
	Jenks, B. H. (See Goodyear, R. B., assignor.)					
5, 521	Jenks, B. H., Bridesburgh, Pa. Spindle for spinning-machines	Aug. 5, 1873	186	59	4	150
141, 440	Same.....Spindle-bolster for spinning-machines	Aug. 5, 1873	26	9	4	137
141, 441	Same.....same	Aug. 5, 1873	27	9	4	137
135, 478	Jenks, C. W., Somerville, Mass. Shirt-bosom	Feb. 4, 1873	79	25	3	134
135, 277	Jenks, W. T., Toledo, Ohio. Street-car	Jan. 28, 1873	736	237	3	107
135, 712	Same.....Key-ring	Feb. 11, 1873	306	97	3	164
139, 063	Same.....Reversible street-car	May 20, 1873	543	171	3	565
139, 159	Jennings, A. W., Ravenna, Ohio. Washing-machine	May 20, 1873	638	199	3	572
	Jennings, B. (See McCarver, Athey & Jennings.)					
137, 685	Jennings, C. S., assignor to Parker and Whipple Company, Meriden, Conn. Reversible knob-latch	Apr. 8, 1873	369	115	3	398
137, 082	Jennings, J. G., Stangate, England. Water-closet	Mar. 25, 1873	669	222	3	328
143, 697	Jennings, R. S., Philadelphia, Pa. Composite roofing	Oct. 14, 1873	277	92	4	411
146, 075	Jennings, S. H., Deep River, and W. F. Arnold, Winthrop, Conn. Joiner's gage	Dec. 30, 1873	954	308	4	709
	Jennison, G. C., Ware, Mass. Baker's oven.....(Extension.)				3	100
144, 983	Jennison, L. H., Monroeville, Ohio. Sulky	Nov. 25, 1873	706	238	4	570
141, 561	Jensen, H., Long Island City, N. Y. Cover for sewing-machine tables	Aug. 5, 1873	132	42	4	146
145, 950	Jeralds, S. E., Cheshire, Conn., assignor of one-half interest to E. R. Lawton. Ferrule	Dec. 30, 1873	849	276	4	700
145, 350	Jerzmanowski, E. J., New York, N. Y. Manufacture of water-gas	Dec. 9, 1873	283	94	4	620
	Jewell, E. M., et al. (See Steele, F., assignor.)					
	Jewell, H. S., et al. (See Steele, F., assignor.)					
140, 199	Jewell, H. S., Brooklyn, N. Y. Metallic fabric for smut-mill cases	June 24, 1873	711	224	3	697
136, 732	Jewett, G. H., assignor of one-half interest to J. Horton, Saline, Mich. Whip-socket	Mar. 11, 1873	345	114	3	282
140, 274	Jewett, J. S., Gloucester, Mass. Machine for cutting tape, &c.	June 24, 1873	772	244	3	703
141, 004	Jewett, S. E., Haverhill, Mass. Belt-tension apparatus	July 22, 1873	614	207	4	86
136, 437	Joannides, J. M., London, England. Apparatus for protecting grain and seed	Mar. 4, 1873	72	25	3	251
140, 275	Jocelyn, A. H., New York, N. Y. Book-cover	June 24, 1873	773	244	3	703
144, 104	Same.....Plate-frame	Oct. 28, 1873	672	222	4	463
	Jocelyn, L. A. (See Holly, H. W., assignor.)					

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5,685	Johannes, J. G. (See Chollar & Johannes.)					
134,673	John, F. K., Moscow, Russia. Spring (Reissue)	Dec. 16, 1873	610	200	4	659
145,211	Same. Spring for vehicles	Jan. 7, 1873	165	55	3	20
	John, J., Chicago, Ill. Fire-proof floor and wall	Dec. 2, 1873	155	53	4	598
	Johns, S. M. (See Parmalee & Johns.)					
136,064	Johnson, A. (See Evert & Johnson.)					
	Johnson, A., Brooklyn, assignor of one-half interest to W. H. Johnson, New York, N. Y. Propelling canal-boats	Feb. 18, 1873	620	204	3	202
136,247	Johnson, A., Brooklyn, N. Y. Bosom, collar, and similar articles of apparel	Feb. 25, 1873	790	256	3	227
144,029	Johnson, A., New York, N. Y. Railway-rail	Oct. 28, 1873	609	202	4	458
146,004	Johnson, A., San Francisco, Cal. Combination plane	Dec. 30, 1873	893	290	4	704
137,210	Johnson, A. C., Rockford, Ill. Table-leaf support	Mar. 25, 1873	785	259	3	337
134,604	Johnson, A. H., Bridgeport, Conn. Tongs for lifting fruit-cans	Jan. 7, 1873	101	32	3	15
142,917	Johnson, A. J., assignor of one-half interest to N. V. Jones, Vicksburgh, Mich. Milking-pail	Sept. 16, 1873	526	179	4	307
	Johnson, A. W. (See Wever & Johnson.)					
142,478	Johnson, A. W., New Haven, Conn. Embroidery-attachment for sewing-machines	Sept. 2, 1873	140	46	4	253
144,106	Johnson, C. C., Somerville, Mass. Toy money-box	Oct. 28, 1873	674	223	4	463
135,226	Johnson, C. H., New Brighton, Pa. Apparatus for making ozone	Jan. 28, 1873	689	221	3	103
145,656	Johnson, C. H., and W. Axford, White Hall, Ill. Ice-creeper	Dec. 16, 1873	558	183	4	655
140,276	Johnson, D. A., Boston, Mass. Whiffletree	June 24, 1873	774	244	3	703
138,406	Johnson, E., McLean County, Ill. Auxiliary-table	Apr. 29, 1873	1,053	332	3	484
138,658	Johnson, E. C., Williamsport, Pa. Machine for making wooden pins	May 6, 1873	168	54	3	511
142,916	Johnson, E. C., South Providence, R. I. Ice-tongs	Sept. 16, 1873	526	179	4	307
135,713	Johnson, E. E., Painesville, Ohio. Window-shades	Feb. 11, 1873	306	97	3	164
5,469	Johnson, E. S., Jersey City, N. J. Ornamental pencil-case (Reissue)	July 1, 1873	197	66	4	24
6,523	Same. Pencil (Design)	Mar. 25, 1873			3	325
137,372	Johnson, F., Toledo, Ohio. Rock-drilling machine	Apr. 1, 1873	84	27	3	364
137,776	Johnson, F. G., Brooklyn, N. Y. Gang-plank	Apr. 15, 1873	465	145	3	419
	Johnson, F. V. (See Johnson, W. A. and F. V. and Worth.)					
145,423	Johnson, G. E., Smith Valley, N. Y. Corn-shocker	Dec. 9, 1873	346	116	4	625
140,373	Johnson, G. F., assignor of two-thirds interest to W. G. Walter, and D. W. J. Hutton, Philadelphia, Pa. Shirt-bosom supporter	July 1, 1873	32	11	4	11
	Johnson, G. H. (See Fryer & Johnson.)					
139,317	Johnson, G. H., Bridgeport, Conn. Hub-band for the wheels of vehicles	May 27, 1873	789	251	3	592
143,351	Johnson, G. H., assignor of one-half interest to W. J. Fryer, jr., New York, N. Y. Fire-proof building	Sept. 30, 1873	907	308	4	364
143,352	Johnson, G. H., and W. G. Fryer, jr., New York, N. Y. Fire-proof roof	Sept. 30, 1873	907	309	4	364
	Johnson, H. J. (See Chace, J. K., assignor.)					
134,674	Johnson, H. M., Marshall, and C. M. Barker, Albion, Mich. Honey-box for bee-hives	Jan. 7, 1873	166	55	3	20
136,065	Johnson, H., Marshall, Mich. Ripper and bag-looper	Feb. 18, 1873	622	204	3	202
	Johnson, J., et al. (See Hubbell, N. C., assignor.)					
135,814	Johnson, J., Lowell, Mass. Pad for horses' feet	Feb. 11, 1873	400	128	3	170
136,522	Johnson, J., Brooklyn, N. Y. Furniture-caster	Mar. 4, 1873	153	49	3	257
137,138	Johnson, J., Iowa City, Iowa. Wagon-loader	Mar. 25, 1873	715	237	3	332
139,248	Johnson, J., New York, N. Y. Machine for cleaning grain, nuts, &c	May 27, 1873	730	230	3	588
144,105	Johnson, J., Harrisburgh, Pa. Heating-stove	Oct. 28, 1873	673	222	4	463
145,424	Johnson, J., Spring City, Pa. Heating-stove	Dec. 9, 1873	346	116	4	625
	Johnson, J. A. (See Burr & Johnson.)					
138,256	Johnson, J. B., San Francisco, Cal. File	Apr. 29, 1873	924	291	3	474
141,058	Johnson, J. B., assignor to Swain, Fuller & Co., Lynn, Mass. Machinery for shaping boot and shoe soles	July 22, 1873	655	{ 221 } { 222 }	4	90
141,795	Johnson, J. B., Alma, Ill. Corn-sheller	Aug. 12, 1873	355	117	4	172
133,257	Johnson, J. B., and G. W. Moulton, Lynn, Mass. Machine for turning heel-rands	Apr. 29, 1873	925	291	3	474
	Johnson, J. D., et al. (See Leonard, T. D., assignor.)					
	Johnson, J. E. (See Akers & Johnson.)					
	Johnson, J. F., et al. (See Rigby, J., assignor.)					
143,160	Johnson, J. F., Cincinnati, Ohio. Hemmer for sewing-machines	Sept. 23, 1873	730	252	4	334
145,425	Johnson, J. G., Elkton, assignor to the Lubricating Car-Axle Company, Baltimore, Md. Car-axle box	Dec. 9, 1873	347	116	4	625
140,200	Johnson, J. H., and J. E. Layton, Springfield, Ohio. Railway-signal	June 24, 1873	711	224	3	698
138,657	Johnson, J. O., New York, N. Y. Fluid-meter	May 6, 1873	168	54	3	511
141,931	Johnson, J. R., Benton Harbor, Mich. Fly-trap	Aug. 19, 1873	485	160	4	191
138,407	Johnson, J. W., assignor of two-thirds interest to I. Sayrs, Port Treverton, Pa. Fanning-mill	Apr. 29, 1873	1,054	332	3	484
145,571	Johnson, J. W., Columbus, Tex. Cotton-worm destroyer	Dec. 16, 1873	487	160	4	649
145,572	Same. same	Dec. 16, 1873	487	160	4	649
136,733	Johnson, M., assignor of one-half interest to A. Feas, Three Rivers, Mich. Hoe	Mar. 11, 1873	346	114	3	282
142,239	Johnson, M. C., assignor to Morse Twist Drill and Machine Company, New Bedford, Mass. Jaw for lathe-chucks	Aug. 26, 1873	770	253	4	224
	Johnson, M. M. (See Weeden, J. B., assignor.)					
	Johnson, N. (See Pooley, T., assignor.)					
139,395	Johnson, N., Newburgh, Minn. Harvester-dropper	May 27, 1873	858	274	3	598
139,793	Johnson, N., Jasper, N. Y. Slide-valve for steam-engines	June 10, 1873	332	103	3	651
144,766	Johnson, P., Springfield, Mass. Iron bridge	Nov. 18, 1873	516	175	4	543
145,875	Johnson, R., Griffin, Ga. Portable fence	Dec. 23, 1873	757	247	4	683
	Johnson, S. (See Telling & Johnson.)					
136,922	Johnson, S., James Creek, Pa. Extension attachment for stove-pipes	Mar. 18, 1873	516	170	3	305
136,165	Johnson, L. S., and M. G., Cortland, N. Y. Article of food	Feb. 25, 1873	727		3	222
136,734	Johnson, T. A., Portland, Me. Foot-rest for chairs	Mar. 11, 1873	346	115	3	282
	Johnson, T. B. (See Curran, J. H., assignor.)					
143,698	Johnson, T. L., Louisville, Ky. Fare-box	Oct. 14, 1873	278	92	4	411
134,675	Johnson, T. W., and A. W. Goodell, New York, N. Y. Apparatus for making tannin extracts, &c	Jan. 7, 1873	167	55	3	20
140,629	Johnson, T. W., Fort Madison, Iowa. Combined refrigerator and soda-water apparatus	July 8, 1873	260	88	4	41
	Johnson, W. (See Storle, O. O., assignor.)					
141,276	Johnson, W., Lambertville, N. J. Lathe-chuck	July 29, 1873	878	287	4	115
141,794	Johnson, W., Milwaukee, Wis. Wrench	Aug. 12, 1873	355	117	4	172
138,656	Johnson, W., and M. Ranney, Northfield, Ohio. Shovel-plow	May 6, 1873	167	53	3	511
143,512	Johnson, W. A. & F. V., and H. S. Worth, Oxford, Pa. Mode of fastening buttons	Oct. 7, 1873	96	34	4	3-8
	Johnson, W. H. (See Johnson, A., assignor.)					
135,431	Johnson, W. H., Springfield, Mass. Wax-thread sewing-machine	Feb. 4, 1873	36	10, 11	3	130
	Johnson, W. J. (See Nourse, L. S., assignor.)					
136,066	Johnson, W. J., Allendale, England. Apparatus for condensing and purifying the smoke of metallurgic furnaces	Feb. 18, 1873	623	{ 204 } { 205 }	3	202

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	Johnson, W. L. D. (<i>See</i> Warinner & Johnson.)					
	Johnston, A., <i>et al.</i> (<i>See</i> Grotz, C., assignor.)					
134, 891	Johnston, A., Lockport, N. Y. Thrashing-machine	Jan. 14, 1873	365	116	3	49
135, 122	Johnston, A., Ottumwa, Iowa. Gathering or ruffling attachment for sewing-machines	Jan. 21, 1873	572	187	3	81
135, 123	Same..... same	Jan. 21, 1873	575	187	3	81
135, 479	Same..... Needle setter, threaders, and cutter	Feb. 4, 1873	80	25	3	134
135, 919	Same..... Tuck-creaser for sewing-machines	Feb. 18, 1873	498	162	3	192
137, 686	Same..... Ruffling or plaiting attachment for sewing-machines	Apr. 8, 1873	370	115	3	398
139, 064	Same..... Ruffler and gatherer for sewing-machines	May 20, 1873	544	171	3	565
146, 005	Same..... Gathering and ruffling attachment for sewing-machines	Dec. 30, 1873	894	290	4	704
135, 124	Johnston, F. S., assignor to G. S. Jones, Philadelphia, Pa. Chevron	Jan. 21, 1873	576	{ 187 188 }	{ 3 3 }	81
5, 510	Johnston, H. M., New York, N. Y. Material for distemper painting..... (Reissue)	July 29, 1873	1,019		4	126
144, 677	Same..... Postal-card	Nov. 18, 1873	440		4	537
144, 678	Same..... Treating paper and card-board to fix marks by metallic pencils	Nov. 18, 1873	441		4	537
	Johnston, J. (<i>See</i> Adams, S. M., assignor.)					
135, 039	Johnston, J., New York, N. Y. Graining or imitating wood	Jan. 21, 1873	511		3	76
140, 507	Johnston, J. A., Montreal, Canada. Tailor's measure	July 1, 1873	141	48	4	20
142, 701	Johnston, J. B., New York, N. Y. Railway-rail	Sept. 9, 1873	338	113	4	281
143, 353	Same..... Horseshoe	Sept. 30, 1873	908	309	4	364
	Johnston, J. J., <i>et al.</i> (<i>See</i> Jackson, R. A., assignor.)					
5, 570	Johnston, J. J., Columbiana, Ohio, assignor of part interest to J. Campbell and C. Seibert, Allegheny, Pa. Process and apparatus for evaporating liquids..... (Reissue)	Sept. 9, 1873	396	132	4	286
	Johnston Ruffler Company. (<i>See</i> Rush, A., assignor.)					
140, 781	Johnston, T. W., Chicago, Ill. Car-starter	July 15, 1873	391	134	4	59
140, 630	Johnston, W. A., New York, N. Y. Emery-wheel	July 8, 1873	261	89	4	41
	Joice, S. A. (<i>See</i> Averell, J. D., assignor.)					
	Joint, W. (<i>See</i> Downing & Joint.)					
137, 373	Jonas, F., assignor of one-half interest to G. O. Ray, Burlington, Iowa. Adjustable bit	Apr. 1, 1873	85	28	3	364
144, 618	Jonas, F., assignor to self and G. O. Ray, Burlington, Iowa. Hub-boring machine	Nov. 18, 1873	392	132	4	533
	Jones & Nimick Manufacturing Company. (<i>See</i> Seibert, J., assignor.)					
	Jones, A. T. (<i>See</i> Cooley, L. C., assignor.)					
139, 580	Jones, A. T., Clinton, Wis. Fruit-jar	June 3, 1873	117	39	3	618
140, 508	Same..... same	July 1, 1873	142	49	4	20
139, 581	Jones, A. T., and L. C. Cooley, New York, N. Y. Preserving fruit, vegetables, &c	June 3, 1873	117		3	618
143, 451	Jones, B., State Line City, Ind. Sad-iron	Oct. 7, 1873	46	16	4	384
	Jones, B. B. (<i>See</i> Wright & Jones.)					
140, 140	Jones, C., Saint Louis, Mo. Puddling-furnace	June 24, 1873	659	207	3	693
	Jones, C. E. (<i>See</i> Caylor, J., assignor.)					
142, 792	Jones, D., assignor of one-half interest to National Tube Works Company, Boston, Mass. Coupling for pipe and oil-well tubing	Sept. 16, 1873	427	144	4	299
135, 647	Jones, E., Boston, Mass. Apparatus for the manufacture of coal-gas	Feb. 11, 1873	248	78	3	159
144, 619	Same..... Sealing dip-pipe of gas-works	Nov. 18, 1873	394	132	4	533
139, 675	Jones, E. P., Shell Mound, Miss. Bale-tie	June 10, 1873	216	70	3	642
140, 046	Jones, E. P., Greensborough, N. C. Seed-planter and fertilizer-distributor	June 17, 1873	556	176	3	677
145, 426	Jones, E. P., Shell Mound, Miss. Device for detaching horses	Dec. 9, 1873	348	116	4	625
140, 420	Jones, E. W., Woodhaven, N. Y. Heel-trimming machine	July 1, 1873	66	23	4	13
	Jones, F. A. (<i>See</i> Pacaud, E. J., assignor.)					
140, 581	Jones, F. A., Boston, Mass. Hand-setting watch	July 8, 1873	218	73	4	37
137, 687	Jones, F. W., Orangeburgh, S. C. Automatic fan	Apr. 8, 1873	372	115	3	398
139, 582	Jones, G., Peekskill, N. Y., assignor to T. J. Fisher, New York, N. Y. Lamp-bracket	June 3, 1873	118	39	3	618
142, 398	Jones, G. L., Vanville, Wis. Compound metal-working machine	Sept. 2, 1873	70	23	4	248
	Jones, G. S. (<i>See</i> Johnston, F. S., assignor.)					
	Jones, G. W. (<i>See</i> Black & Jones.)					
144, 767	Jones, G. W., Philadelphia, Pa. Toy-propeller	Nov. 18, 1873	517	175	4	543
145, 210	Same..... Propulsion of vessels by direct action of steam	Dec. 2, 1873	153	52	4	597
137, 845	Jones, H. C., Dowagiac, Mich. Grain-basket	Apr. 15, 1873	523	163	3	424
137, 846	Same..... same	Apr. 15, 1873	523	163	3	424
142, 341	Same..... same	Sept. 2, 1873	17	6	4	243
142, 342	Same..... same	Sept. 2, 1873	18	6	4	243
142, 343	Same..... Basket	Sept. 2, 1873	19	7	4	243
145, 573	Same..... Grain basket	Dec. 16, 1873	488	161	4	649
5, 408	Jones, H. K., Kensington, Conn., assignor to The Hart, Bliven, and Mead Manufacturing Company. Machine for graduating carpenters' squares..... (Reissue)	May 13, 1873	461	145	3	546
	Jones, H. M. (<i>See</i> Fitch & Jones)					
138, 408	Jones, H. P., Springfield, Ohio. Middlings-separator	Apr. 29, 1873	1,056	332	3	484
142, 702	Jones, H. P., Davenport, Iowa. Steam-valve	Sept. 9, 1873	338	113	4	281
144, 768	Same..... Kneading-board	Nov. 18, 1873	518	175	4	543
	Jones, J. (<i>See</i> Wheeler, M. M., assignor.)					
137, 211	Jones, J., New York, N. Y. Door-bolt	Mar. 25, 1873	785	259	3	337
135, 341	Jones, J., assignor to W. A. Freeman, Newark, N. J. Plane for scraping	Jan. 28, 1873	792	256	3	111
135, 342	Same..... Carpenter's bench	Jan. 28, 1873	793	256	3	111
145, 657	Jones, J., assignor of one-half interest to J. F. Holmes, Providence, R. I. Hoisting-machine	Dec. 16, 1873	558	184	4	655
138, 091	Jones, J., and J. and J. Dunkerley, Paterson, N. J. Carriage-axle box	Apr. 22, 1873	754	239	3	452
135, 920	Jones, J. B., Philadelphia, Pa. Car-starter	Feb. 18, 1873	499	162	3	192
142, 703	Jones, J. C., New York, N. Y. Refrigerator for transporting oysters, &c	Sept. 9, 1873	339	114	4	281
	Jones, J. E., <i>et al.</i> (<i>See</i> Corser, G. A., assignor.)					
145, 737	Jones, J. G., Falmouth, Mass. Spading-machine	Dec. 23, 1873	642	209	4	673
	Jones, J. L. (<i>See</i> Jones, J. M. and J. L.)					
141, 562	Jones, J. L., Oxford, N. C. Machine for manufacturing plug-tobacco	Aug. 5, 1873	133	42	4	146
141, 563	Same..... Machine for cleaning and preparing tobacco-leaves	Aug. 5, 1873	134	42	4	146
143, 767	Jones, J. M., Paris, and J. L. Jones, Lexington, Ky. Wheelbarrow	Oct. 21, 1873	362	120	4	428
137, 688	Jones, J. O., Brooklyn, assignor to self and A. Starke, New York, N. Y. Bolt-machine	Apr. 8, 1873	372	115	3	399
141, 059	Same..... Bolt-heading machine	July 22, 1873	657	222	4	90
143, 578	Jones, J. O., Boston, Mass. Rake	Oct. 14, 1873	171	58	4	403
	Jones, J. R., <i>et al.</i> (<i>See</i> Brandeis, S., assignor.)					
	Jones, J. T. (<i>See</i> Jones, T. J. and J. T.)					
136, 324	Jones, J. T., Ilion, N. Y. Sewing-machine	Feb. 25, 1873	860	277	3	232
134, 892	Jones, J. W., Middleport, Ohio. Machine for chamfering and crozing barrel-staves	Jan. 14, 1873	367	116	3	49
136, 523	Jones, J. W., Towson, Md. Car-coupling	Mar. 4, 1873	154	49	3	253
139, 160	Jones, L. R., Carthage, Ind. Safety-stirrup	May 20, 1873	639	199	3	572
134, 751	Jones, M. D., Boston, Mass. Bracket for flower-pots	Jan. 14, 1873	242	79	3	40

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
5, 319	Jones, M. M., Morrisville, N. Y. Cotton-press..... (Reissue)...	Mar. 11, 1873	409	135	3	287
136, 735	Jones, N., Syracuse, N. Y. Truss-pad.....	Mar. 11, 1873	347	115	3	282
	Jones, N. V. (See Johnson, A. J., assignor.)					
	Jones, O. (See Marston & Jones.)					
137, 083	Jones, P., Newark, N. J. Wheel for vehicles.....	Mar. 25, 1873	670	222	3	328
143, 077	Jones, R. R., Pillar Point, N. Y. Wheel for vehicles.....	Sept. 23, 1873	669	230	4	329
143, 078	Same..... same.....	Sept. 23, 1873	670	230	4	329
143, 286	Same..... Device for detaching horses.....	Sept. 30, 1873	843	290	4	360
140, 631	Jones, S. H., East Albany, N. Y. Leather-trimming machine.....	July 8, 1873	261	89	4	41
143, 827	Jones, S. J., Helena, Mont. Reciprocating-engine.....	Oct. 21, 1873	412	137	4	432
141, 932	Jones, T. J. and J. T., Sharon, Pa. Machine for making paper-tubes.....	Aug. 19, 1873	486	160	4	192
	Jones, T. O. (See Boon, A. T., assignor.)					
142, 108	Jones, W., Davenport, Iowa., assignor of one-half interest to Nelson, La Tourette & Co., Bushnell, Ill. Windmill.....	Aug. 26, 1873	661	217	4	215
143, 354	Jones, W., New Albany, Ind. Garden-weeding implement.....	Sept. 30, 1873	910	309	4	364
144, 908	Jones, W., Brooklyn, N. Y. Machine for turning carriage-axles.....	Nov. 25, 1873	643	219	4	564
	Jones, W. A. (See O'Haire, J. A., assignor.)					
140, 831	Jones, W. S., Damariscotta Mills, Me. Railway-car stove.....	July 15, 1873	436	148	4	63
144, 984	Jones, W. W., Philadelphia, Pa. Bed-spring.....	Nov. 25, 1873	706	239	4	570
138, 659	Jonson, J., assignor to I. Chase, New York, N. Y. Float-valve for horse-troughs, &c.....	May 6, 1873	170	54	3	511
142, 240	Jordan, A. C., assignor to self and C. H. Boesse, New York, N. Y. Apparatus for corking bottles.....	Aug. 26, 1873	771	253	4	224
137, 374	Jordan, G. W., Passaic, N. J. Adjusting-attachment to reversing levers, &c.....	Apr. 1, 1873	86	28	3	364
145, 876	Jordan, J., and A. Paul, Liverpool, England. Safety-valve.....	Dec. 23, 1873	758	247	4	683
	Jordan, J. C. (See Cummings, Smith & Jordan.)					
5, 294	Jordan, L., and L. E. Smith, assignors to the Collins Company, Collinsville, Conn. Wrench..... (Reissue)...	Feb. 25, 1873	890	286	3	235
144, 620	Jordan, M. S., Tilton, N. H. Rod for drawing in warp-thread.....	Nov. 18, 1873	395	132	4	533
145, 108	Jordan, R. K., Oakland, Cal. Horse-shoe.....	Dec. 2, 1873	62	20	4	590
	Jordan, T. (See Gridley, F. R., assignor.)					
144, 546	Jordan, W. A., assignor of one-half interest to A. J. Aiken, New Orleans, La. Car-starter.....	Nov. 11, 1873	325	109	4	516
140, 047	Jordon, B. L., Mercersburgh, Pa. Chair-fan attachment..... (Reissue)...	June 17, 1873	557	176	3	677
	Josef, P. P., et al. (See Bedell, O. T., assignor.)..... (Reissue)...					
	Same..... (See Taber, W. D., assignor.)..... (Reissue)...					
145, 109	Joseph, N., San Francisco, Cal. Toy putty-blower.....	Dec. 2, 1873	63	21	4	590
141, 356	Joss, G. N., New Philadelphia, Ohio. Sash-balance.....	July 29, 1873	958	312	4	122
143, 768	Jowitt, J., Brooklyn, N. Y. Filter for oils, acids, &c.....	Oct. 21, 1873	363	120	4	428
141, 796	Joy, H. P., South Berwick Junction, Me. Knitting-holder.....	Aug. 12, 1873	356	117	4	172
141, 357	Joyce, J. L., New Haven, Conn. Manufacture of boots and shoes.....	July 29, 1873	959	312	4	122
142, 855	Joyce, S., New York, N. Y. Spring-hinge.....	Sept. 16, 1873	477	163	4	303
140, 782	Jud, J. B. F., New York, N. Y. Ink for stamping purposes.....	July 15, 1873	392	.....	4	59
5, 370	Judd, A. D., New Haven, Conn. Window-button..... (Reissue)...	Apr. 22, 1873	881	278	3	462
6, 686	Same..... Bracket..... (Design)...	May 27, 1873	.....	.....	3	586
6, 694	Same..... Hat and coat hook..... (Design)...	June 3, 1873	.....	.....	3	608
145, 351	Same..... Metallic bracket.....	Dec. 9, 1873	284	95	4	620
145, 352	Same..... Inkstand.....	Dec. 9, 1873	285	95	4	621
137, 450	Judd, A. D. & E. M., assignors to H. L. Judd, New Haven, Conn. Curtain-fixtute.....	Apr. 1, 1873	152	49	3	369
144, 679	Judd, D., Hinsdale, N. Y. Excavator.....	Nov. 18, 1873	442	149	4	537
	Judd, E. M. (See Judd, A. D. & E. M.)					
135, 560	Judd, E. M., New Haven, Conn. Bolt.....	Feb. 4, 1873	154	49	3	139
	Judd, H. L. (See Judd, A. D. & E. M., assignors.)					
135, 561	Judd, H. L., Brooklyn, N. Y. Cord-tightener for curtain-fixtures.....	Feb. 4, 1873	154	49	3	140
139, 676	Same..... Curtain-hook.....	June 10, 1873	218	70	3	642
139, 895	Judd, M., Wallingford, Conn. Fastener for the meeting-rails of sashes.....	June 17, 1873	433	134	3	667
	Judd, O. S., et al. (See Miller, C. G., assignor.)					
140, 711	Judd, T., and C. H. Pierson, assignors to Philadelphia Gas-Machine Company, Philadelphia, Pa. Carbureting-apparatus.....	July 8, 1873	328	111	4	46
138, 409	Judd, T., and E. Doty, Janesville, Wis., assignors to the Philadelphia Gas-Machine Company, Philadelphia, Pa. Apparatus for carbureting air.....	Apr. 29, 1873	1,057	{ 332 } { 333 }	{ 3 }	484
139, 468	Judson, E., assignor to Giant Powder Company and Atlantic Giant Powder Company, San Francisco, Cal. Explosive compound or giant powder.....	June 3, 1873	22	.....	3	610
	Judson, E. S. (See Judson, H. & E. S.)					
139, 677	Judson, H. & E. S., Brooklyn, N. Y. Lady's dress.....	June 10, 1873	219	70	3	643
144, 338	Judson, J. S., Austin, Minn. Spring bed-bottom.....	Nov. 4, 1873	137	46	4	489
134, 893	Judson, W. B., New York, N. Y. Spring-coupling for mattresses, seats, &c.....	Jan. 14, 1873	368	117	3	49
135, 125	Juengst, G., Somers, N. Y. Bobbin for sewing-machine shuttles.....	Jan. 21, 1873	578	188	3	82
137, 928	Jurgens, L., Prescott, Wis. Stove-pipe.....	Apr. 15, 1873	590	186	3	429
143, 983	Juvel, U. A., Glen's Falls, N. Y. Watch-case spring.....	Oct. 28, 1873	568	188	4	455
136, 736	Kacrovsky, J. K., Bridgeport, Conn. Expanding boring-tool.....	Mar. 11, 1873	348	115	3	282
144, 769	Kade, C., Lexington, Mo. Combined table and secret writing-desk.....	Nov. 18, 1873	519	176	4	543
144, 850	Kaestner, C., Chicago, Ill. Sifting-shovel.....	Nov. 25, 1873	601	204	4	560
6, 349	Kagy, H., assignor to T. Potter, Sons & Co., Philadelphia, Pa. Oil-cloth..... (Design)...	Jan. 21, 1873	.....	.....	3	70
6, 350	Same..... same..... (Design)...	Jan. 21, 1873	.....	.....	3	70
6, 991	Same..... same..... (Design)...	Nov. 11, 1873	.....	.....	4	504
6, 992	Same..... same..... (Design)...	Nov. 11, 1873	.....	.....	4	504
6, 993	Same..... same..... (Design)...	Nov. 11, 1873	.....	.....	4	504
6, 994	Same..... same..... (Design)...	Nov. 11, 1873	.....	.....	4	505
138, 500	Kallmes, J., San Francisco, Cal. Treating gold and silver ores.....	May 6, 1873	27	.....	3	500
137, 689	Kallmeyer, G., Bremen, Germany. Button-hole sewing-machine.....	Apr. 8, 1873	373	116	3	399
142, 025	Kaltenbacher, L., Louisville, Ky. Pantaloon-stretcher.....	Aug. 19, 1873	565	187	4	198
143, 452	Kampfe, F., New York, N. Y. Lamp.....	Oct. 7, 1873	47	16	4	384
143, 628	Kamphaus, J. G., Pittsburgh, Pa. Child's carriage.....	Oct. 14, 1873	212	72	4	406
137, 077	Kane, C. J., Milford, Conn. Loom.....	Mar. 25, 1873	665	220	3	328
	Kane, F. (See Gum, J., assignor.)					
144, 680	Kane, J. F., assignor of one-half interest to S. Guthrie, San Francisco, Cal. Tap, plug, and faucet connection.....	Nov. 18, 1873	444	149	4	537
146, 006	Kane, J. J., Brooklyn, N. Y. Burglar alarm.....	Dec. 30, 1873	896	290	4	704
134, 550	Kane, T. H., New York, N. Y. Drawing-board.....	Jan. 7, 1873	44	14	3	11
139, 249	Kane, W. D., Chicago, Ill. Tuck-creaser for sewing-machines.....	May 27, 1873	730	231	3	588
136, 737	Kanne, W. H., Baltimore, Md. Oyster-winder.....	Mar. 11, 1873	348	115	3	282
140, 277	Kappe, W. J. H., Quincy, Ill. Chicken-coop.....	June 24, 1873	774	245	3	703
145, 062	Kappler, L., Woodstock, Ill. Medical compound or bitters.....	Dec. 2, 1873	20	.....	4	587
137, 451	Karcheski, X., Belleville, N. J., assignor to S. D. McMillan, trustee, New York, N. Y. Water-proof material.....	Apr. 1, 1873	153	.....	3	369
137, 452	Same..... Process of rendering fibrous and textile materials water-proof.....	Apr. 1, 1873	154		3	369

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette	
			Spec.	Drig.	Vol.	Page.
144, 681	Karg, M., assignor to self and M. Haber, Albany, N. Y. Car-brake	Nov. 18, 1873	445	150	4	537
139, 396	Karn, E. W. (See Karn, J. W. & E. W.)					
141, 508	Karn, J. W. & E. W., Watkins, N. Y. Sleigh-runner	May 27, 1873	858	274	3	598
146, 076	Karshner, W. W., Aubrey, Kans. Cooking-stove	Aug. 5, 1873	88	27	4	142
140, 278	Kaskel, J. W., Paducah, Ky. Candy-cutter	Dec. 30, 1873	955	308	4	709
140, 278	Kastenbein, C., London, England, assignor to E. L. Ford, Brooklyn, N. Y. Machine for distributing type	June 24, 1873	775	{ 245 246	{ 3	703
140, 279	Same.....Type-composing machine	June 24, 1873	777	{ 246 247	{ 3	703
135, 126	Kater, T., Hamilton, Canada. Piano sounding-board	Jan. 21, 1873	579	188	3	82
135, 127	Katzenstein, L., New York, N. Y. Packing for piston-rods, &c.	Jan. 21, 1873	580	189	3	82
142, 479	Kauffman, A. (See Bierbower, J., assignor.)					
137, 078	Kauffman, M. J., Arcola, Ill. Windmill	Sept. 2, 1873	140	46	4	253
139, 469	Kaufman, A., Davisville, Cal. Plow-clevis	Mar. 25, 1873	666	221	3	328
143, 910	Kaufman, D., Boiling Springs, Pa. Iron post for wire fences	June 3, 1873	23	7	3	610
141, 717	Kaufman, J. G., deceased, by R. J. Morthland, administratrix, Nevada, Mo. Flour-bolt	Oct. 21, 1873	482	162	4	438
141, 564	Kaufman, P., Hudson, Ill. Feeding-elevator for corn-shellers	Aug. 12, 1873	281	92	4	166
145, 427	Kavanagh, P., Canarsie, N. Y. Sheave	Aug. 5, 1873	135	43	4	146
143, 287	Kaylor, E., Pittsburgh, Pa. Nut-lock	Dec. , 1873	349	117	4	625
140, 832	Kayser, L., Homburg, assignor to J. B. C. Camozzi and H. J. Schloesser, Frankfort, Germany. Railway-gage	Sept. 20, 1873	844	291	4	360
144, 909	Kealy, J. P., and J. Rigney, Bridgeport, Conn. Sharpening-machine	July 15, 1873	437	149	4	63
5, 920	Same.....Pneumatic station-indicator	Nov. 25, 1873	643	219	4	564
138, 028	Kear, G. W. (See Sax & Kear.)					
145, 428	Kearney, W., Belleville, N. J. Valve for water-pipes (Reissue)	Jan. 7, 1873	211	68	3	23
139, 896	Keating, J. M. D., New York, N. Y. Postal-card machine	Apr. 22, 1873	697	221	3	447
144, 207	Keck, J., Dwight, Ill. Car-coupling	Dec. 9, 1873	350	117	4	625
142, 546	Kee, A. J. (See White & Kee.)					
145, 574	Keech, E., Poughkeepsie, N. Y. Elevator for buildings, &c.	June 17, 1873	434	134	3	667
145, 877	Keech, G., Centreville, Mich. Railway-tie	Nov. 4, 1873	34	10	4	481
139, 897	Keech, L. P., assignor to J. Phelan, Brooklyn, N. Y. Paper file and binder	Sept. 2, 1873	200	65	4	258
140, 280	Keefe, D. (See Boynton & Keefe.)					
141, 358	Keehn, F., Milwaukee, Wis. Printer's side-stick and quoin	Dec. 16, 1873	489	161	4	649
137, 453	Keeler, H. J. (See Gardner, T. W., assignor.)					
143, 017	Keeler, J., and C. C. Harris, Kewanee, Ill. Windmill	Dec. 23, 1873	758	248	4	683
145, 815	Keeler, J. F., Pittsburgh, Pa. Platform-scales	June 17, 1873	435	135	3	667
139, 583	Keeler, L. B., Westerville, Ohio. Reciprocating-churn	June 24, 1873	779	247	3	703
145, 951	Keeley, O. B., et al. (See Smith & Brown, assignors) (Design.)					
138, 410	Keely, N., Philadelphia, Pa., assignor to self and W. P. Outterson, Akron, Ohio. Paper-making machine	July 29, 1873	959	312	4	122
141, 797	Keen, G. W., Zanesville, Ohio. Nut-lock	Apr. 1, 1873	155	50	3	369
5, 645	Keen, H., Philadelphia, Pa. Steering-apparatus	Sept. 23, 1873	620	211	4	325
139, 962	Keen, M. E. (See Keen, M. L., assignor.)					
144, 682	Keen, M. L., assignor by mesne assignment to M. E. Keen, Jersey City, N. J. Furnace for evaporating alkaline solutions, &c.	Nov. 18, 1873	446	{ 150 151	{ 4	537
135, 815	Keene, G. A., Lynn, Mass. Carriage-step	Feb. 11, 1873	401	129	3	170
145, 951	Keene, G. W. (See Beasley, J. & J., jr., assignors.)					
139, 583	Keep, W. J., Troy, N. Y. Stove-grate	June 2, 1873	119	40	3	618
145, 951	Keffler, P., Reading, Pa. Shutter-fastener	Dec. 30, 1873	849	276	4	700
138, 410	Kegg, W., Lasellsville, N. Y. Fire-escape	Apr. 29, 1873	1,058	333	3	485
141, 797	Keith, A. A. (See Townsend, Hughes & Keith.)					
5, 645	Keith, A. B., trustee. (See Keith, J., assignor.) (Reissue.)					
139, 962	Keith, A. B. (See Shorey, S. W., assignor.)					
144, 985	Keith, A. C. (See Carter & Keith.)					
141, 797	Keith, C. A., Danvers, assignor to G. McKay, trustee, Boston, Mass. Manufacture of boots and shoes	Aug. 12, 1873	356	117	4	172
5, 645	Keith, J., Providence, R. I., assignor by mesne assignment to A. B. Keith, trustee, Boston, Mass. Metallic seam for uniting materials (Reissue)	Nov. 4, 1873	180	60	4	493
139, 962	Keith, T. K., Haverhill, Mass. Sewing-machine	June 17, 1873	483	152	3	671
144, 985	Keith, T. K., Haverhill, and A. Seaver, Milford, Mass. Measuring-device for spooling-machine	Nov. 5, 1873	707	239	4	570
139, 794	Keizer, L. R. (See Painter, W., assignor.)					
139, 318	Kellam, D. C., Detroit, Mich. Window-screen	June 10, 1873	333	103	3	651
140, 201	Keller, H., Sauk Centre, Minn. Oil-can	May 27, 1873	790	251	3	592
140, 925	Same.....Reciprocating-winnower	June 24, 1873	712	224	3	698
135, 816	Keller, J. C., Philadelphia, Pa. Metal-drilling machine	July 15, 1873	524	175	4	70
137, 212	Keller, J. F., Hagerstown, Md. Straw-cutter	Feb. 11, 1873	401	129	3	171
137, 929	Same.....Horse hay-rake	Mar. 25, 1873	786	259	3	337
144, 107	Same.....Grain-drill	Apr. 15, 1873	590	186	3	429
137, 454	Keller, M. B., Penn Township, Lancaster County, Pa. Shifting top for vehicles	Oct. 28, 1873	675	223	4	463
6, 381	Keller, P., assignor to self and J. Heim, New York, N. Y. Gas-regulator	Apr. 1, 1873	155	50	3	369
139, 250	Kellett, S., San Francisco, Cal. Center-piece (Design)	Feb. 4, 1873			3	127
136, 923	Kelley, E. W., Lowell, Mass. Machine for making horseshoe-nails	May 27, 1873	731	231	3	588
144, 108	Kelley, E. Y. (See Wellings & Soules, assignors.)					
135, 128	Kelley, T., et al. (See Cadwallader, C. N., assignor.)					
141, 359	Kellie, W. M., Chicago, Ill. Door-spring	Mar. 18, 1873	516	170	3	305
141, 359	Kellogg, D., Ypsilanti, Mich. Peanut-heater	Oct. 28, 1873	675	223	4	464
141, 359	Kellogg, D. W., Battle Creek, Mich. Traction or portable engine	Jan. 21, 1873	581	189	3	82
141, 359	Kellogg, D. W., Battle Creek, Mich., and B. C. Coffin, New York, N. Y. Straw-burning attachment for steam-boilers	July 29, 1873	960	313	4	122
146, 077	Kellogg, E. H. (See Eggleston, J. S., assignor.) (Reissue.)					
146, 077	Kellogg, E. P., New York, N. Y. Combined tatting-shuttle and crochet-needle	Dec. 30, 1873	956	309	4	709
134, 894	Kellogg, G. G. (See Morahan, B., assignor.)					
143, 163	Kellogg, H. (See Crosby & Kellogg.)					
136, 438	Kellogg, H., Floyd, Iowa. Wheel for vehicles	Jan. 14, 1873	369	117	3	50
143, 164	Kellogg, H., Milford, Conn. Manufacture of fur-coated fabrics	Sept. 23, 1873	732	252	4	334
143, 164	Kellogg, O. W., Fond du Lac, Wis. Street-sweeper	Mar. 4, 1873	73	25	3	251
143, 164	Kellogg, U. H., Jamestown, N. Y. Medical compound or opium-cure	Sept. 23, 1873	733		4	334
144, 986	Kellogg, W. P. & Co. (See Trussell, J. W., assignor.)					
144, 547	Kellogg, W. S. (See Hughes, H., assignor.)					
144, 986	Kellogg, W. T., Troy, N. Y. Blacksmiths' forge	Nov. 25, 1873	707	239	4	570
144, 547	Kelly, E. H., Jackson, Tenn. Watchmaker's lathe	Nov. 11, 1873	326	10	4	516
144, 547	Kelly, H. C. (See Sholes & Kelly.)					
144, 547	Kelly, I. C. (See Knox, J. M., assignor.)					
144, 547	Kelly, J., et al. (See Lord, T., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 333	Kelly, J., <i>et al.</i> (See O'Neill, E. V., assignor.)	Apr. 29, 1873	995	313	3	479
135, 432	Kelly, P., New York, N. Y. Carpet-stretcher.	Feb. 4, 1873	38	11	3	130
5, 636	Kelly, W., Louisville, Ky., assignor of one-half interest to T. C. Coleman. Manufacture of steel castings.	Oct. 28, 1873	747	248	4	469
5, 637	Same. Mold and core for casting steel.	Oct. 28, 1873	748	248	4	469
136, 738	Kelly, W., Baltimore, Md., assignor of one-half interest to W. Armstrong, Martinsburgh, W. Va. Combined oil-can and torch.	Mar. 11, 1873	349	116	3	282
141, 798	Kelly, W. E., New Brunswick, N. J. Steam-generator.	Aug. 12, 1873	358	118	4	172
141, 799	Same. Sectional steam-generator.	Aug. 12, 1873	359	118	4	172
142, 918	Kelsey, F., and F. H. Hosmer, said Hosmer assignor of one-half interest to J. A. Hosmer, Sandusky, Ohio. Machine for dressing fish.	Sept. 16, 1873	527	180	4	307
138, 565	Kelsey, H., Ottawa, Kans. Fruit-gatherer.	May 6, 1873	89	28	3	505
143, 453	Kelsey, O. S., Hartford, Conn. Hot-air furnace.	Oct. 7, 1873	47	16, 17	4	384
138, 660	Kelsey, W. A., Meriden, Conn. Printing-press.	May 6, 1873	170	55	3	511
	Kelsey, W. H. (See Forman, W. A., assignor.)					
	Kelsey, W. H., <i>et al.</i> (See West & Fish, assignors.)					
	Kemp, T. P. (See Nealey & Kemp.)					
139, 584	Kempe, E., assignor to self and N. C. Newton, Richmond, Va. Sewing-machine fan attachment.	June 3, 1873	120	40	3	619
139, 718	Kempshall, E., New Britain, Conn. Tobacco-hanger.	June 10, 1873	263	82	3	646
	Kempton, D. W. (See Merrill & Kempton.)					
134, 676	Kendall, C. H., McConnellsburgh, Pa. Car-coupling.	Jan. 7, 1873	168	55	3	20
	Kendall, E., <i>et al.</i> (See Lane, F. A., assignor.) (Reissue.)					
144, 548	Kendall, J. L., Foxborough, Mass. Paper product.	Nov. 11, 1873	327	110	4	516
	Kendall, L. B. (See Wilson & Kendall.)					
142, 109	Kenderdine, T., Lisbon, Iowa. Combined can-opener and knife or fork.	Aug. 26, 1873	662	217	4	215
	Kendrick, A. W., <i>et al.</i> (See Estell, S. F., assignor.)					
	Kendrick, A. W. (See Osborn & Kendrick.)					
	Kendrick, C. T. (See Thompson & Kendrick.)					
145, 738	Kendrick, H. H., Fulton, assignor of one-half interest to J. W. Throop, Syracuse, N. Y. Combined step-ladder and ironing-board.	Dec. 23, 1873	642	{ 209 } { 210 }	{ 4 }	673
	Kendrick, J., <i>et al.</i> (See Crowell, J. H., assignor.)					
	Same. (See Winsor, J. S., assignor.)					
	Kendrick, J. H., <i>et al.</i> (See Crowell, J. H., assignor.)					
	Kendrick Loom-Harness Company. (See Crowell, J. H., assignor.)					
142, 110	Kendrick, P., Trenton, N. J. Method of fastening blocks in triple-chains.	Aug. 26, 1873	662	217	4	215
142, 634	Same. Car-coupling.	Sept. 9, 1873	281	92	4	276
139, 509	Kendrick, T. D., Boston, Mass. Spark-arrester.	June 3, 1873	57	19	3	613
	Kenfield, F. (See Cooke & Kenfield.)					
135, 921	Kenfield, J., jr., Elmira, N. Y. Water-heater.	Feb. 18, 1873	500	162	3	192
	Keniston, C., <i>et al.</i> (See Coy, F. W., assignor.)					
134, 551	Keniston, C., Somerville, Mass., assignor to the Shoe-Machinery Manufacturing Company. Machine for skiving counters.	Jan. 7, 1873	45	14	3	11
142, 026	Keniston, C., Somerville, assignor to self and W. Butterfield, Boston, Mass. Seam for leather-work.	Aug. 19, 1872	566	187	4	198
145, 658	Keniston, C., Somerville, Mass. Metal-fastening material for leather-work.	Dec. 16, 1873	560	184	4	655
5, 476	Kennedy, A. H., Brunswick, assignor by mesne assignment to J. M. Segur, Akron, Ohio. Apparatus for transmitting motion.	July 1, 1873	204	68	4	25
5, 477	Same. Machine for shearing sheep.	July 1, 1873	205	68	4	25
143, 355	Kennedy, D., Brooklyn, N. Y. Rock-drill.	Sept. 30, 1873	910	309	4	365
141, 565	Kennedy, J., assignor to self and J. Moffit, Osage Mission, Kans. Trace-buckle.	Aug. 5, 1873	136	43	4	146
145, 503	Kennedy, J. C., Toledo, Ohio, assignor to J. W. Tufts, Medford, Mass. Apparatus for charging soda-fountains.	Dec. 16, 1873	420	138	4	643
134, 677	Kennedy, J. W., Saint Louis, Mo. Derrick and crane.	Jan. 7, 1873	169	56	3	20
140, 374	Same. Hose-coupling.	July 1, 1873	33	11	4	11
141, 718	Same. same.	Aug. 12, 1873	282	92	4	166
142, 793	Same. Fire-proof Mansard roof.	Sept. 16, 1873	428	{ 144 } { 145 }	{ 4 }	299
135, 714	Kennedy, P., jr., and A. B. Diss, Watertown, N. Y. Car-coupling.	Feb. 11, 1873	307	97	3	164
142, 164	Kennedy, S., Allegheny City, Pa. Griddle.	Aug. 26, 1873	706	233	4	219
	Kennedy, T., <i>et al.</i> (See Gordon, W., assignor.)					
138, 162	Kenney, M. M., Travis, Tex. Method of adjusting signaling mirrors.	Apr. 22, 1873	810	258	3	456
	Kerrick, A. (See Scott, T., assignor.)					
136, 166	Kent, A., assignor of one-half interest to J. Frildrich, Baltimore, Md. Safety-stud, &c.	Feb. 25, 1873	727	234	3	222
135, 817	Kent, B. L., Coatesville, Pa. Earth-closet.	Feb. 11, 1873	402	{ 129 } { 130 }	{ 3 }	171
	Kent, E. F., <i>et al.</i> (See Thurber, A. E., assignor.)					
	Kent, J. (See Westmoreland, W. and E., assignors.)					
136, 602	Kent, J., New York, N. Y. Cloth-cutting machine.	Mar. 11, 1873	236	80	3	273
139, 898	Same. Hanger for pulleys.	June 17, 1873	436	135	3	667
142, 399	Kent, W. J., Buffalo, N. Y. Reed-organ.	Sept. 2, 1873	70	23	4	248
144, 549	Kent, W. J., assignor of one-half interest to G. A. Prince, Buffalo, N. Y. Reed-organ.	Nov. 11, 1873	327	110	4	516
143, 513	Kenyon, L. H., East Greenwich, R. I. Hand-car.	Oct. 7, 1873	96	34	4	388
134, 678	Kenyon, W. H., North Providence, R. I. Corn-harvester.	Jan. 7, 1873	169	56	3	30
142, 241	Kepler, W. M., Cincinnati, Ohio. Fire-place.	Aug. 26, 1873	772	254	4	224
145, 212	Kepner, S., Pottstown, Pa. Grate.	Dec. 2, 1873	155	53	4	598
135, 562	Ker, S., Washington, D. C. Curtain-fixture.	Feb. 4, 1873	155	50	3	140
136, 067	Kern, J. W., Portland, Oreg. Railway-bed.	Feb. 18, 1873	624	205	3	202
136, 068	Same. Car-wheel.	Feb. 18, 1873	625	205	3	202
138, 163	Kernaul, M. H., Berlin, Prussia. Sewing-machine.	Apr. 22, 1873	810	258	3	456
139, 963	Kernodle, J. W., and A. H. Haun, Lebanon, Ind. Ash-leach.	June 17, 1873	483	152	3	671
6, 358	Kerr, H. S., assignor to J. Gay, Philadelphia, Pa. Carpet.	Jan. 21, 1873			3	70
6, 687	Kerr, H. S., assignor to Leedom, Shaw & Stewart, Philadelphia, Pa. Carpet.	May 27, 1873			3	586
6, 688	Same. same.	May 27, 1873			3	586
137, 084	Kerr, J., assignor to W. H. Towers, Boston, Mass. Flavoring, coating, and putting up tobacco.	Mar. 25, 1873	671		3	328
	Kershaw, J. M. (See Burridge & Kershaw.)					
142, 919	Kersten, H., Wheeling, W. Va. Corpse-preserver.	Sept. 16, 1873	528	181	4	307
143, 079	Kerstine, H. C., Cleveland, Ohio. Grate-bar.	Sept. 23, 1873	670	231	4	329
144, 910	Kersting, F., assignor of two-thirds interest to C. Rudow and B. F. Broadwell, Grand Rapids, Mich. Refining varnishes.	Nov. 25, 1873	645		4	564
	Kervan, F. B., <i>et al.</i> (See Park, F., assignor.)					
142, 344	Kessberger, A., Springfield, Ill. Axle and thimble-skein for vehicles.	Sept. 2, 1873	19	7	4	244
143, 784	Kested, B. D., Glen, N. Y. Carpet-fastener.	Oct. 21, 1873	377	125	4	429

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 930	Ketcham, C. E., Washington, D. C. Fish-trap	Apr. 15, 1873	591	186	3	430
143, 018	Ketcham, F. M., Indianapolis, Ind. Fire-shovel	Sept. 23, 1873	621	211	4	325
138, 164	Ketcham, I. A., Breslau, N. Y. Oyster-dredge	Apr. 22, 1873	811	258	3	457
136, 524	Ketchum, O. W., Toronto, Canada. Oil-burning steam-generator	Mar. 4, 1873	154	50	3	258
139, 795	Same. Combined furnace and steam-generator	June 10, 1873	334	104	3	651
138, 896	Keuffel, W., and H. Esser, Hoboken, N. J. Drawing-board	May 13, 1873	390	122	3	539
144, 393	Keyes, S., Bennington, Vt. Steam-boiler furnace	Nov. 11, 1873	195	67	4	506
	Kibbe, H. C., et al. (See Disney, M., assignor.)					
	Kibby, R. C. (See Ropp & Kibby.)					
144, 770	Kiblinger, P. F., Millersburgh, Ind. Eave-trough	Nov. 18, 1873	530	176	4	543
	Kichline, W. E. (See Frankenfield & Kichline.)					
143, 080	Kichner, J. T., and W. H. Odenatt, Philadelphia, Pa. Metal-planing machine	Sept. 23, 1873	671	231	4	329
	Kidd Iron Works Company. (See Gleason, W., assignor.)					
5, 246	Kidd, J. S., and M. L. Mellville, Brooklyn, N. Y. Culinary pot	Jan. 21, 1873	642	209	3	87
140, 833	Kidder, C. F., Millburgh, Mass. Thill-coupling	July 15, 1873	438	149	4	63
136, 069	Kidder, J. H., assignor to self and G. E. Hood, Lawrence, Mass. Ink-well	Feb. 18, 1873	626	205	3	202
142, 480	Kidder, J. H., Lawrence, Mass. Pen-wiper	Sept. 2, 1873	141	46	4	253
136, 070	Kidder, J. H., and G. E. Hood, Lawrence, Mass. Inkstand	Feb. 18, 1873	627	206	3	202
	Kiesling, A. L. (See Berghausen & Kiesling.)					
142, 242	Kiff, T. F., Cincinnati, Ohio. Washing-machine	Aug. 26, 1873	773	254	4	224
	Kihlgren, C. A. (See Moore & Wyman, assignors.)					
142, 920	Kilborn, J., assignor of one-third interest to W. Grellier, Chicago, Ill. Corn-harvester	Sept. 16, 1873	528	181	4	307
134, 895	Kilburn, C., assignor to self and J. H. Gates, Philadelphia, Pa. Folding crib	Jan. 14, 1873	370	117	3	50
135, 896	Same. Bow for chair-backs	Jan. 14, 1873	370	117	3	50
140, 834	Kilburn, W., Napa, Cal. Coupling for gas and water mains	July 15, 1873	438	149	4	63
140, 835	Same. Pavement	July 15, 1873	439	149	4	63
143, 514	Same. Hose-coupling	Oct. 7, 1873	97	34	4	388
139, 899	Kilgore, D. Y., Philadelphia, Pa. Inside blind	June 17, 1873	437	135	3	667
144, 771	Kilgore, J. L., Cleveland, Ohio. Making barrel-heads	Nov. 18, 1873	520	177	4	543
137, 690	Kilgore, J. L., Wilmington, Del. Folding-bedstead	Apr. 8, 1873	375	116	3	399
138, 165	Kilner, J. M., Chester, Great Britain. Boat-detaching apparatus	Apr. 22, 1873	812	258	3	457
140, 202	Same. Cable-stopper	June 24, 1873	713	224	3	698
143, 911	Kimball, B., Saint Louis, Mo. Cotton-bale tie	Oct. 21, 1873	483	163	4	438
138, 897	Kimball, C. E., New York, N. Y. Sewing-machine brake	May 13, 1873	391	122	3	539
145, 504	Kimball, E. A., assignor to self, J. E. Kimball, and E. Merritt, Abingdon, Mass. Cut-nail machine	Dec. 16, 1873	422	{ 138 } { 139 }	{ 4 }	643
	Kimball, H. L. (See Cook & Kimball.)					
142, 794	Kimball, J. D., Reading, Mass. Cutter-head for planing or molding machines	Sept. 16, 1873	429	145	4	299
	Kimball, J. E., et al. (See Kimball, E. A., assignor.)					
	Kimball, W. H. (See Morris & Kimball.)					
140, 712	Kimball, W. S., Philadelphia, Pa. Water-cooler	July 8, 1873	329	112	4	46
144, 109	Kimble, S. W., Springfield, Ill. Bending-machine	Oct. 28, 1873	676	223	4	464
143, 356	Kindermann, A., Cleveland, Ohio. Straw-cutter	Sept. 30, 1873	912	310	4	365
144, 208	King, A. D., Granville Corners, Mass., and J. W. King, Bridgeport, Conn. Faucet	Nov. 4, 1873	35	10	4	481
	King, A. J. (See Simmons & King.)					
140, 632	King, D. H., and W. M. Hulse, Palmyra, Ill. Equalizing-attachment for plows	July 8, 1873	263	89	4	41
143, 357	King, D. M., Garrettsville, Ohio. Machine for sorting potatoes	Sept. 30, 1873	913	310	4	365
137, 931	King, D. M. and G. E., Mantua Station, Ohio. Potato-digger	Apr. 15, 1873	592	187	3	430
142, 795	King, E., Dunkirk, N. Y. Fence-post	Sept. 16, 1873	429	145	4	299
	King, G. E. (See King, D. M. and G. E.)					
145, 429	King, G. E., New York, N. Y. Skirt-protector	Dec. 9, 1873	350	117	4	626
134, 897	King, J., Warren, Ohio. Spectacles	Jan. 14, 1873	370	118	3	50
138, 166	King, J., assignor of one-half interest to Berner, English & Over, Indianapolis, Ind. Grain-drill	Apr. 22, 1873	813	259	3	457
139, 161	King, J., Quincy, Ill. Machine for elevating building material	May 20, 1873	639	200	3	572
144, 276	King, J., Oswego, N. Y. Slide for extension-tables	Nov. 4, 1873	89	29	4	485
135, 129	King, J. A., Hamburg, Iowa. Well-boring machine	Jan. 21, 1873	583	189	3	82
	King, J. F. (See Denney, W. H., assignor.)					
	King, J. M., et al. (See Lee, G. D., assignor.)					
	King, J. W. (See King, A. D. and J. W.)					
141, 877	King, P. F., Saint Louis, Mo. Nut and bolt fastening	Aug. 19, 1873	443	144	4	188
145, 110	King, R. T., Pana, Ill. Hardening the surfaces of iron	Dec. 2, 1873	64		4	590
135, 563	King, S. D., Middletown, N. Y. Lawn-mower	Feb. 4, 1873	155	50	3	140
137, 691	Same. same	Apr. 8, 1873	376	117	3	399
	King, S. L. (See Woodside, G. W., assignor.)					
139, 162	King, S. M., Lancaster, Pa. Shingle-machine	May 20, 1873	641	200	3	573
139, 065	King, T. M., Murfreesborough, Tenn. Harrow	May 20, 1873	546	172	3	565
	King, V. A. (See Pratt & King.)					
138, 501	King, W. C., Pittsburgh, Pa. Molasses-pitcher	May 6, 1873	28	10	3	500
138, 502	Same. Jelly-jar	May 6, 1873	28	10	3	500
138, 503	Same. Candy-jar lid	May 6, 1873	29	10	3	500
146, 078	Same. Beer-mug	Dec. 30, 1873	957	309	4	709
143, 161	King, W. F., Gonzales County, Texas. Fence	Sept. 23, 1873	731	252	4	334
135, 990	King, W. H., Westbury, England. Pocket-book	Feb. 18, 1873	556	184	3	197
	King, W. M. (See Sterick, S. T. F., assignor.)					
138, 411	Kingan, T. D., Indianapolis, Ind. Apparatus for cooling rooms and buildings	Apr. 29, 1873	1,059	333	3	485
140, 375	Same. Apparatus for cooling air	July 1, 1873	34	11	4	11
142, 796	Same. Refrigerator	Sept. 16, 1873	430	145	4	299
145, 659	Same. Apparatus for cooling air and making ice	Dec. 16, 1873	560	184	4	655
136, 838	Kingdon, T. R., and L. P. Dodge, New York, N. Y. Mill for grinding paint	Mar. 18, 1873	446	148	3	299
141, 277	Kingman, J. W., and A. Eurgens, Laramie City, Wyo. Smoke and steam burner	July 29, 1873	878	288	4	115
143, 579	Kingsbury, G. J., Rochester, N. Y. Cracker-machine	Oct. 14, 1873	171	58	4	403
141, 647	Kingsbury, H., Rochester, N. Y. Sash-lifter	Aug. 12, 1873	224	70	4	161
140, 141	Kingsford, T., Oswego, N. Y. Apparatus for the manufacture of starch	June 24, 1873	660	208	3	693
141, 442	Same. same	Aug. 5, 1873	28	9	4	137
145, 213	Same. same	Dec. 2, 1873	157	54	4	598
	Kingsland, L. S. (See Wills, H. A., assignor.)					
	Kingsley, S. W. (See Warner & Kingsley.)					
135, 991	Kingwill, J. F., Chicago, Ill. Ratchet-pinion	Feb. 18, 1873	557	184	3	197
136, 325	Same. Harvester	Feb. 25, 1873	861	277	3	232
136, 071	Kinne, E. M., Cuba, N. Y. Fastening for halter-rings, &c.	Feb. 18, 1873	627	206	3	202
140, 203	Kinney, F. S., New York, N. Y. Machine for cutting tobacco	June 24, 1873	713	225	3	698
143, 162	Kinney, H. B., Leonardsville, N. Y. Thill-coupling	Sept. 23, 1873	731	252	4	334
134, 808	Kintz, H. J., Greece, N. Y. Medical compound for liniment	Jan. 14, 1873	294		3	44

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 654	Kintz, J., Meriden, assignor to self and P. J. Clark, West Meriden, Conn. Die for forming tubes	Mar. 11, 1873	2-0	94	3	277
139, 066	Kintz, J., West Meriden, assignor to J. Kintz, Meriden, and P. J. Clark, West Meriden, Conn. Chandelier	May 20, 1873	546	172	3	565
139, 319	Kintz, J., assignor to self and P. J. Clark, West Meriden, Conn. Coloring-matter	May 27, 1873	790	.....	3	592
142, 165	Same.....Chandelier-center	Aug. 26, 1873	707	233	4	219
146, 079	Same.....Lantern	Dec. 30, 1873	957	309	4	709
	Kintzel, J. M. (See Green & Kintzel.)					
140, 713	Kinzel, G. J., Knoxville, Tenn. Track-lifter	July 8, 1873	230	112	4	46
135, 343	Kinzer, J., Pittsburgh, Pa. Car-axle box	Jan. 28, 1873	794	257	3	111
138, 566	Kinzer, J., assignor to self, R. Pitcairn, D. M. Watt, and J. J. Torley, Pittsburgh, Pa. Seal-lock	May 6, 1873	90	29	3	505
140, 926	Kinzer, J., Pittsburgh, Pa. Hasp-lock	July 15, 1873	525	175	4	70
	Kip Manufacturing Company. (See Hays, C., assignor.) (Reissue.)					
144, 209	Kirby, G. W., Detroit, Mich. Saw-gage	Nov. 4, 1873	35	10	4	481
141, 933	Kirby, J., jr., Adrian, Mich. Lamp	Aug. 19, 1873	487	161	4	192
143, 912	Kirby, S. R., Detroit, Mich., assignor to J. Hoyt, New York, N. Y. Kiln for drying lumber	Oct. 21, 1873	483	163	4	438
142, 111	Kirby, W. A., assignor to self and D. M. Osborn, Auburn, N. Y. Mowing-machine	Aug. 26, 1873	663	218	4	216
136, 839	Kirch, F. A., Mansfield, Pa. Sleigh-brake	Mar. 18, 1873	447	148	3	300
137, 692	Kircher, J., New York, N. Y. Obtaining sulphur, sulphuric acid, and sulphurets of sodium and potassium from gas-lime, &c.	Apr. 8, 1873	377	.....	3	399
138, 504	Same.....Obtaining bisulphide of carbon from gas-lime, &c.	May 6, 1873	29	.....	3	500
141, 878	Kirchhofer, L. F., Union Hill, N. J., assignor by mesne assignment to J. E. Wheeler. Process for preserving milk	Aug. 19, 1873	443	.....	4	188
139, 796	Kirchhöffer, G. W., Chicago, Ill. Refining butter	June 10, 1873	335	104	3	651
136, 525	Kirchner, G. A., Philadelphia, Pa. Tray for sewing-machines	Mar. 4, 1873	155	50	3	258
	Kirk, E. W. (See Buck & Kirk.)					
136, 439	Kirk, J., Newark, N. J. Photographic negative	Mar. 4, 1873	74	.....	3	251
	Kirk, P. C. (See Davis, R., assignor.)					
	Kirk, P. C., et al. (See Siner, J. B., assignor.)					
144, 772	Kirk, S. W., Philadelphia, Pa. Separating precious metals from ores	Nov. 18, 1873	521	.....	4	544
5, 385	Kirkham, G. B., New York, N. Y. Treadle	Apr. 29, 1873	1,116	352	3	489
136, 603	Same.....same	Mar. 11, 1873	237	80	3	273
137, 932	Kirkham, L. G., Derby, Conn. Machine for boring blind-stiles	Apr. 15, 1873	594	187	3	430
140, 376	Kirkham, T. C., Ancaster, Canada. Card-grinding machine	July 1, 1873	34	11	4	11
143, 984	Kirkhart, J. F., and J. Ramsay, Long Creek Township, Iowa. Water-wheel	Oct. 28, 1873	568	189	4	455
142, 635	Kirkpatrick, C. H., La Fayette, Ind. Hay-elevator	Sept. 9, 1873	282	93	4	276
	Kirkpatrick, W. H. (See Barrett & Fenimore, assignors.)					
138, 029	Kirkup, L., New York, N. Y., assignor of two-thirds interest to Steele & Condict, Jersey City, N. J., and H. Wilson, Brooklyn, N. Y. Wrought-iron beam	Apr. 22, 1873	699	221	3	447
6, 880	Kisch, D., New York, N. Y. Ruche-holder	Sept. 9, 1873	.....	.....	4	270
	Kisner, D. P., et al. (See Borden, T., assignor.)					
136, 072	Kisor, J., Nevada, Ohio. Fruit-gatherer	Feb. 18, 1873	628	206	3	202
143, 985	Kissel, J., Cassopolis, Mich. Punching and shearing machine	Oct. 28, 1873	569	189	4	455
142, 921	Kistler, W. F., assignor to Thomas & Robinson, Cincinnati, Ohio. Sheet-metal bending-machine	Sept. 16, 1873	530	181	4	308
135, 344	Kitch, W. W., Crestline, Ohio. Snap-hook	Jan. 28, 1873	795	257	3	111
139, 163	Kitson, G. L., assignor to self and G. W. Carr, Philadelphia, Pa. Automatic regulating-valve	May 20, 1873	641	200	3	573
142, 027	Same.....same	Aug. 19, 1873	566	187	4	198
135, 818	Kitson, G. L., and J. Benner, assignors to selves and G. W. Carr, Philadelphia, Pa. Seal-lock	Feb. 11, 1873	403	130	3	171
	Kitson, R. (See Harding, D., assignor.)					
	Same.....(See Woton, W., assignor.)					
144, 394	Kitson, R., Lowell, Mass. Cotton-opener	Nov. 11, 1873	196	67	4	506
145, 300	Same.....Feed-regulator for cotton-openers	Dec. 9, 1873	239	80	4	617
135, 992	Kittle, J., East Bend, N. C. Combination padlock	Feb. 18, 1873	558	184	3	197
	Kitzmiller, E. A., et al. (See Cuddy, J., assignor.)					
	Kitzmiller, E. A. (See Todd, W., assignor.)					
145, 952	Klar, J., Shelbyville, Ill. Corn-planter	Dec. 30, 1873	850	276	4	701
141, 360	Klee, J., Dayton, Ohio. Bottling liquids	July 29, 1873	961	313	4	122
5, 708	Kleemann, C. A., deceased, by K. Kleemann, executrix, assignor to C. F. A. Hinrichs, Brooklyn, N. Y. Lamp	Dec. 30, 1873	999	322	4	713
	Kleemann, K., executrix. (See Kleemann, C. A.) (Reissue.)					
	Klein, A. (See Hamburger, Siskind & Klein.)					
	Klein, C. C. (See Atkinson & Klein.)					
145, 505	Klein, C. C., Philadelphia, Pa. Rotary engine	Dec. 16, 1873	425	{ 139 } { 140 }	4	644
	Klenen, F., et al. (See Simpson & Drake, assignors.)					
	Klenen, H., et al. (See Simpson & Drake, assignors.)					
	Klenen, M., et al. (See Simpson & Drake, assignors.)					
136, 655	Kline, A. K., Readington, N. J. Car-coupling	Mar. 11, 1873	281	94	3	277
145, 214	Kline, C. W., Beloit, Wis. Wind-wheel	Dec. 2, 1873	157	54	4	598
139, 164	Kline, R., and R. M. Jack, assignors of one-third interest to F. G. Pompeji, Pottstown, Pa. Running-gear for carriages	May 20, 1873	643	201	3	573
141, 566	Kline, T. D., Opelika, Ala. Railway cattle-guard	Aug. 5, 1873	136	43	4	146
137, 213	Kloozewski, A., and D. Mindeleff, Washington, D. C. Mucilage	Mar. 25, 1873	787	.....	3	337
140, 927	Kloman, A., Pittsburgh, Pa. Apparatus for cooling and removing blast-furnace slag	July 15, 1873	526	176	4	70
134, 898	Klotz, D. H., Philadelphia, Pa. Tray, or show-board	Jan. 14, 1873	371	118	3	50
143, 913	Klotz, P., assignor to B. C. Bibb, Baltimore, Md. Name-plate for stoves	Oct. 21, 1873	484	163	4	438
134, 679	Knaff, R., Nashville, Tenn. Guitar	Jan. 7, 1873	171	56	3	20
141, 005	Knapp, A. M., Lowell, Mass. Breast-cup	July 22, 1873	614	207	4	87
138, 258	Knapp, E., San Francisco, Cal. Sash-holder	Apr. 29, 1873	926	292	3	474
142, 243	Knapp, J. H., New York, N. Y. Pen and pencil case	Aug. 26, 1873	773	254	4	225
144, 110	Knapp, J. W., Cross River, N. Y. Fish-grappling spear	Oct. 28, 1873	677	224	4	464
142, 704	Knapp, M. H., Fulton, N. Y. Treadle for sewing-machines	Sept. 9, 1873	340	114	4	281
142, 400	Knapp, O. B., Brandon, Wis. Windmill	Sept. 2, 1873	71	23	4	248
142, 636	Same.....same	Sept. 9, 1873	282	93	4	277
144, 339	Knapp, W. M., Muncie, Ind. Trestle for painting coach-bodies, &c.	Nov. 4, 1873	138	46	4	489
	Knaus, W. C. (See Furr & Knaus.)					
145, 506	Kneeland, S. R., Charlestown, Mass. Screw-driver	Dec. 16, 1873	430	140	4	644
139, 165	Kneisly, C. F., and W. Wensthoff, assignors to Farmers' Friend Manufacturing Company, Dayton, Ohio. Manufacture of shafting	May 20, 1873	644	201	3	573
145, 805	Knevals, C. B., New York, N. Y. Ventilating car-window	Dec. 23, 1873	699	229	4	678
142, 922	Knickerbocker, M., New Lenox, Ill. Corn-planter	Sept. 16, 1873	531	181	4	308

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Knight, E. (<i>See</i> White & Knight.)					
	Knight, E. C., Philadelphia, Pa. Arranging couches in railway cars..... (Extension)	June 28, 1873			3	690
	Same..... Mode of arranging couches in railway-cars..... (Extension)	Sept. 27, 1873			4	322
7, 034	Knight, H., assignor to J. Gay, Philadelphia, Pa. Carpet..... (Design)	Dec. 9, 1873			4	614
137, 777	Knight, J. E., Hyde Park, Mass. Self-acting spinning-jack	Apr. 15, 1873	465	145	3	419
137, 214	Knight, J. R., and J. P. Coburn, Greenfield, Mass. Bed-urinal for medical purposes.	Mar. 25, 1873	787	260	3	337
140, 048	Knight, L., assignor of one-half interest to J. H. Thomas and A. Whitlock, Salem, N. Y. Loose pulley	June 17, 1873	558	176	3	677
	Knight, N. N. (<i>See</i> Worster, R., assignor.)					
144, 111	Knight, S. D., Bryan, Ohio. Saw-jointer	Oct. 28, 1873	677	224	4	464
140, 142	Knight, W., and N. W. Lewis, Bridgeport, Conn. Clutch	June 24, 1873	661	208	3	693
138, 807	Knisley, J. H., and J. C. Ferguson, Rainsborough, Ohio. Wagon-standard	May 13, 1873	312	97	3	533
144, 112	Knoll, G., San Francisco, Cal. Construction of tunnels and sewers	Oct. 28, 1873	678	224	4	464
146, 007	Knopp, J., Columbiana, Ohio. Sausage-cutter	Dec. 30, 1873	897	291	4	704
136, 073	Knorr, J. F., New York, N. Y. Harness-mounting	Feb. 18, 1873	629	206	3	202
	Knott, E. B. (<i>See</i> Gaunt, J. F., assignor.)					
	Knott, R. (<i>See</i> Hall & Knott.)					
140, 421	Knowles, D., Philadelphia, Pa. Hoisting apparatus	July 1, 1873	66	24	4	13
144, 113	Knowles, D. W., Hotchkissville, Conn. Splicing for fence-rails	Oct. 28, 1873	679	224	4	464
139, 251	Knowles, J. H., Lawrence, Mass. Loom-filling fork	May 27, 1873	732	231	3	588
	Knowles, L. J., Worcester, Mass. Method of operating valves of pumping-engines.. (Ex- tension)	Jan. 4, 1873			2	729
134, 992	Same..... Loom	Jan. 21, 1873	464	{ 149 150 }	3	72
142, 401	Same..... Loom-stopping mechanism	Sept. 2, 1873	72	24	4	248
138, 753	Knowles, W. W., assignor to Atwater Manufacturing Company, Plantsville, Conn. Shaft-iron for carriages	May 13, 1873	267	83	3	529
5, 313	Knowlton, A., assignor to J. Hill, trustee, Boston, Mass. Machine for arranging nails. (Reissue)	Mar. 4, 1873	214	71	3	262
134, 899	Knowlton, A., assignor to J. W. Brooks, trustee, Boston, Mass. Machine for making boot and shoe heels	Jan. 14, 1873	372	118	3	50
135, 345	Same..... Machine for selecting and delivering nails	Jan. 28, 1873	796	257	3	111
136, 074	Same..... Nail selecting and delivering machine	Feb. 18, 1873	630	207	3	203
142, 402	Knowlton, A., assignor to Knowlton & James, Boston, Mass. Machinery for crimping boot and shoe uppers	Sept. 2, 1873	73	24	4	248
	Knowlton & James. (<i>See</i> Knowlton, A., assignor.)					
137, 455	Knowlton, C. H., assignor of one-half interest to F. G. Cook and J. D. Spear, Rockland, and J. E. Robinson, Augusta, Me. Car-coupling	Apr. 1, 1873	156	50	3	370
137, 079	Knowlton, J. L., assignor of one-half interest to W. E. Walton, Sharon Hill, Pa. Car-brake	Mar. 25, 1873	666	221	3	328
143, 165	Knox, J. E., Ballston Spa, N. Y. Car-coupling	Sept. 23, 1873	734	253	4	334
144, 395	Knox, J., Three Rivers, Mich. Shuttle for sewing-machines	Nov. 11, 1873	197	67	4	506
137, 933	Knox, J. M., assignor to self and I. C. Kelly, Rensselaer, Ind. Cultivator	Apr. 15, 1873	595	187	3	430
134, 809	Knox, M. W., Sheridan, N. Y. Mowing-machine knife-grinder	Jan. 14, 1873	294	95	3	44
140, 509	Knox, R. F., assignor to Palmer, Knox & Co., San Francisco, Cal. Rotary-blower	July 1, 1873	143	49	4	20
	Knox, W. H. (<i>See</i> Brower & Knox.)					
	Same..... (<i>See</i> Brower, S. P., assignor.)					
140, 143	Knudson, A. A., Brooklyn, N. Y. Printing-telegraph	June 24, 1873	662	208	3	694
141, 144	Knudson, O., Effingham, Ill. Combined roller and planter	July 22, 1873	738	244	4	96
	Knutson, P. (<i>See</i> Weber & Knutson.)					
138, 898	Koch, F., and R. Brass, Brooklyn, N. Y., assignors to J. Boyle, New York, N. Y. Sewing-machine	May 13, 1873	391	123	3	540
145, 215	Same..... Sewing-machine	Dec. 2, 1873	158	54, 55	4	598
144, 550	Koch, G., Cass, Pa. Well-drill	Nov. 11, 1873	328	110	4	516
5, 221	Koch, J. C., Brooklyn, N. Y. Portfolio..... (Reissue)	Jan. 7, 1873	212	68	3	23
135, 130	Same..... Portfolio for music	Jan. 21, 1873	584	169	3	82
137, 215	Koch, R., New York, N. Y. Governor for gas-exhausters, &c.	Mar. 25, 1873	788	260	3	337
141, 278	Koeb, G., assignor to self and J. B. Korn, Springfield, Ohio. Car-coupling	July 29, 1873	879	288	4	116
137, 778	Koegel, C. H., Buffalo, N. Y. Weight-books for knitting-machines	Apr. 15, 1873	466	145	3	419
145, 575	Koeller, H. H., Camp Point, Ill. Dropper for seed-planters	Dec. 16, 1873	490	161	4	649
135, 131	Kohler, J., Cincinnati, Ohio. Machine for dressing nuts and bolts	Jan. 21, 1873	584	190	3	82
	Kohn, T. (<i>See</i> Gillespie & Kohn.)					
	Kolb, A. (<i>See</i> Kolb, J. and A.)					
	Kolb, C. (<i>See</i> Wirth, A., assignor.)					
135, 346	Kolb, J. and A., Oxford, Ind. Door-check	Jan. 28, 1873	797	257	3	111
135, 347	Kolle, C., New York, N. Y. Exercising-machine	Jan. 28, 1873	798	258	3	111
136, 248	Kollock, M. H., Philadelphia, Pa. Railway car-truck	Feb. 25, 1873	791	{ 256 257 }	3	227
137, 216	Same..... Dummy-engine	Mar. 25, 1873	789	260	3	338
140, 049	Komp, A., New York, N. Y. Neck-tie supporter	June 17, 1873	559	177	3	677
134, 993	Konold, C., Pittsburgh, Pa. Die for forging frowers	Jan. 21, 1873	467	150	3	73
137, 217	Koons, C. B., Philadelphia, Pa. Soldering apparatus	Mar. 25, 1873	790	261	3	338
143, 081	Koons, J., New Auburn, Minn. Grain-separator	Sept. 23, 1873	672	231	4	329
141, 567	Kooser, J. H., Pekin, Ill. Washing-machine	Aug. 5, 1873	137	43	4	146
143, 580	Kopping, J. G., and J. Weideman, assignors of one-half interest to A. B. Henry, Clinton, Iowa. Baking-powder for bread	Oct. 14, 1873	172		4	403
142, 797	Koppitz, J., Boston, and F. B. Mayer, Cambridgeport, Mass. Coloring leather	Sept. 16, 1873	431		4	299
137, 004	Korn, C., Brooklyn, N. Y. Leaching and tanning apparatus	Mar. 18, 1873	584	194	3	310
	Korn, J. B. (<i>See</i> Koeb, G., assignor.)					
134, 900	Korting, E., Vienna, Austria. Steam-condenser	Jan. 14, 1873	374	118	3	50
141, 361	Same..... same	July 29, 1873	962	313	4	122
142, 856	Same..... Steam-jet apparatus for forcing and exhausting air and condensing steam	Sept. 16, 1873	477	163	4	303
136, 739	Korwan, F., Manheim, Germany, assignor to self and M. Flürscheim, New York, N. Y. Automatic gas-lighting apparatus	Mar. 11, 1873	350	116	3	282
143, 986	Koth, F., New York, N. Y. Piano action	Oct. 28, 1873	570	189	4	455
	Kousakoff, A. (<i>See</i> Tiranoff, J. and N., and Kousakoff.)					
145, 878	Kraft, E., Tyrone, Pa. Bung for beer-barrels	Dec. 23, 1873	762	249	4	683
136, 377	Kraft, C. J. F., Cleveland, Ohio. Treadle for sewing-machines	Mar. 4, 1873	24	8	3	247
144, 773	Kram, J., Germantown, Pa. Vegetable-cutter	Nov. 18, 1873	522	177	4	544
135, 132	Kramer, J. W., Bloomsburgh, Pa. Weather-threshold	Jan. 21, 1873	585	190	3	82
141, 279	Krapf, C., Philadelphia, Pa. Lathe for turning tobacco-pipes	July 29, 1873	880	288	4	116
145, 353	Krapf, X., and J. F. Boerchel, Allentown, Pa. Car-coupling	Dec. 9, 1873	285	95	4	621
134, 752	Krafer, F., Pittsburgh, Pa. Lounge	Jan. 14, 1873	243	79	3	40
142, 028	Kraus, T. C. H., Fishkill, N. Y. Pump	Aug. 19, 1873	567	187	4	198

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
138, 030	Krause, H. W., jr. (See Krause, J. W., & H. W., jr.)					
144, 987	Krause, J. W., & H. W., jr., Philadelphia, Pa. Laying concrete pavement.....	Apr. 22, 1873	700	221	3	448
137, 847	Krausnick, E. E., Saint Louis, Mo. Apparatus for preserving and forcing beer.....	Nov. 25, 1873	708	239	4	570
	Krebs, C., Wilmington, Del. Wash-board and rubber.....	Apr. 15, 1873	524	164	3	424
	Krebs, M. (See Bennett, Krebs & Haley.)					
	Kreid, U. (See Beck, H., assignor.)					
	Krein, J., et al. (See Succop, J. R., assignor.)					
137, 934	Kreischer, G. F., and L. A. Tartieré, New York, N. Y. Compound for gas-retorts.....	Apr. 15, 1873	595	.....	3	430
140, 422	Krementz, G., Newark, N. J. Die for enlarging and sizing plain finger-rings.....	July 1, 1873	67	24	4	13
140, 423	Same.....Die for manufacturing plain finger-rings.....	July 1, 1873	68	24	4	14
138, 661	Kretschmer, E., Coburgh, Iowa. Bee-hive.....	May 6, 1873	171	55	3	511
137, 005	Kreter, R., assignor to D. & J. J. Decker, New York, N. Y. Upright-piano actions.....	Mar. 18, 1873	585	195	3	310
145, 879	Kreter, R., New York, N. Y. Piano-action.....	Dec. 23, 1873	762	249	4	683
136, 249	Kriebel, H. K., Lansdale, Pa. Cultivator.....	Feb. 25, 1873	792	257	3	227
137, 693	Krinks, J. S., assignor to E. R. Ives and C. Blakeslee, Bridgeport, Conn. Toy-perambulator.....	Apr. 8, 1873	378	117	3	399
141, 280	Kromer, O., Sandusky, Ohio. Steam-whistle.....	July 29, 1873	881	289	4	116
142, 166	Same.....same.....	Aug. 26, 1873	708	234	4	219
140, 377	Kromer, T., Freidburgh, Grand Duchy of Baden. Lock for door, &c.....	July 1, 1873	35	12	4	11
137, 307	Kromschroeder, J. F. G., London, England. Carbureter.....	Apr. 1, 1873	24	8	3	359
	Kruger, E. (See Hensgen & Kruger.)					
142, 345	Kruger, J., Indianapolis, Ind. Device for building cisterns.....	Sept. 2, 1873	20	7	4	244
6, 373	Krumm, M., Columbus, Ohio. Iron fence.....(Design)	Jan. 28, 1873	.....	.....	3	100
136, 378	Krummenauer, J., New York, N. Y. Animal-trap.....	Mar. 4, 1873	25	8	3	217
137, 612	Krumscheid, P., Boston, Mass. Wash-boiler.....	Apr. 8, 1873	306	95	3	393
137, 218	Kruse, J. H., New Melle, Mo. Washing-machine.....	Mar. 25, 1873	790	261	3	338
145, 660	Kuessner, E., Cincinnati, Ohio. Machine for forming pans.....	Dec. 16, 1873	561	184	4	(55)
141, 145	Kugler, O., Raritan, assignor to self, J. D. McCauley, and J. Van Fleet, Clinton, and J. A. Thompson, Reddington, N. J. Cultivator.....	July 22, 1873	739	244	4	96
141, 146	Kugler, O., Three Bridges, assignor to self, J. D. McCauley, and J. Van Fleet, Clinton, and J. A. Thompson, Reddington, N. J. Cultivator.....	July 22, 1873	740	245	4	97
140, 204	Kuh, S., Jefferson, Iowa. Envelope.....	June 24, 1873	714	225	3	698
141, 719	Same.....Advertising-lantern.....	Aug. 12, 1873	282	92	4	166
145, 739	Same.....Apparatus for binding stalks.....	Dec. 23, 1873	643	210	4	673
5, 592	Kuhn, R. K., and T. O. Atkinson, Doylestown, Pa. Envelope.....(Reissue)	Oct. 7, 1873	147	49	4	392
135, 819	Same.....same.....	Feb. 11, 1873	403	130	3	.....
135, 820	Kühner, L., New York, N. Y. Piano-action.....	Feb. 11, 1873	404	130	3	171
5, 432	Kuhns, B., Dayton, Ohio. Grain-drill.....(Reissue)	June 3, 1873	178	58	3	623
5, 542	Same.....Seed-planter.....(Reissue)	Aug. 19, 1873	620	204	4	202
	Kummer, E. (See Harris & Kummer)					
142, 244	Kunkel, D., Oregon, Mo. Drill-extractor.....(Design)	Aug. 26, 1873	774	255	4	225
145, 740	Kunkle, J., Newton Falls, Ohio. Water-wheel.....	Dec. 23, 1873	643	{ 210 211 }	4	674
134, 680	Kunz, J., Napoleon, Ohio. Nail-clinchers.....	Jan. 7, 1873	172	56	3	20
134, 681	Kursh, F., Philadelphia, Pa. Bracelet-fastening.....	Jan. 7, 1873	173	57	3	20
135, 821	Kurtz, H. H., Salisbury, Pa. Separator for thrashing-machines.....	Feb. 11, 1873	405	131	3	171
136, 326	Kutscher, F., New Haven, Conn. Bottle-stopper.....	Feb. 25, 1873	861	277	3	232
	Kutz, H. D. (See Stockstill & Kutz.)					
145, 661	Kyser, L., Philadelphia, Pa. Shoulder-pad.....	Dec. 16, 1873	563	185	4	655
	La Belle Glass Company. (See Baggs, A. H., assignor.)					
	Laberie, P. (See Berthel & Laberie.)					
138, 259	Lacey, L., Bath, Ill. Corn-planter.....	Apr. 29, 1873	926	292	3	474
5, 711	Lacroix, C. N., Minneapolis, Minn. Middlings-purifier.....(Reissue)	Dec. 30, 1873	1,004	323	4	713
139, 585	Same.....same.....	June 3, 1873	121	40	3	619
142, 705	Same.....Flour and middlings purifier.....	Sept. 9, 1873	340	114	4	231
144, 988	Same.....Middlings-purifier.....	Nov. 25, 1873	710	240	4	570
139, 397	Lacroix, N., Milwaukee, Wis. Middlings-purifier.....	May 27, 1873	859	{ 274 275 276 }	3	598
142, 112	Ladd, A. S., and C. N. Corning, Concord, N. H. Wood-screw.....	Aug. 26, 1873	664	218	4	216
134, 901	Ladd, D. O. B., Racine, Wis., assignor to self and P. E. Merrihew, Fair Haven, Mass. Thrashing-machine.....	Jan. 14, 1873	375	119	3	50
	Ladd, H. H., et al. (See Briggs, L. W., assignor.)					
6, 455	Ladd, J. D., assignor to the New York Ottoman and Hassock Company, New York, N. Y. Ottoman.....(Design)	Feb. 18, 1873	.....	.....	3	189
6, 457	Same.....same.....(Design)	Feb. 25, 1873	.....	.....	3	218
143, 166	La Dow, C., South Galway, N. Y. Combined rake and tedder.....	Sept. 23, 1873	734	253	4	334
135, 648	La Du, D., Warner, assignor of one-half interest to J. P. Hier, Syracuse, N. Y. Tobacco-press.....	Feb. 11, 1873	249	78	3	159
	Lafargne, J. P. (See Wilkinson, Passoz, Lafargne, & Dutreih.)					
5, 440	Lafferty, R. M., Toledo, Ohio, assignor to self and E. P. Smith. Pump.....(Reissue)	June 10, 1873	378	118	3	655
5, 441	Same.....same.....(Reissue)	June 10, 1873	379	118	3	655
139, 252	Lafferty, S., Chicago, Ill. Dish-pan.....	May 27, 1873	733	231	3	588
141, 147	Laffin, M., Chicago, Ill. Treating ores.....	July 22, 1873	741	.....	4	97
142, 245	Laffin, P., Warren, assignor to G. Draper, Hopedale, Mass. Bobbin for spinning-machines.....	Aug. 26, 1873	775	255	4	225
144, 989	La Fonte, J. G., Dayton, Ohio. Corn-planter.....	Nov. 25, 1873	712	241	4	570
135, 822	Laforge, F. H., Waterbury, Conn. Securing the covers on boxes for stop-cocks for water and gas service pipes.....	Feb. 11, 1873	406	131	3	171
	La Forme, F. J., Worcester, Mass. Nursing-bottle.....(Extension)	Nov. 29, 1873	.....	.....	4	557
140, 714	Lafreniere, O., Brooklyn, N. Y. Horse-collar.....	July 8, 1873	331	112	4	46
143, 082	La Grove, W. A. P., assignor to self, C. O'Kemp, Brooklyn, N. Y., and H. H. Webb, New York, N. Y. Automatic toy-dancer.....	Sept. 23, 1873	673	232	4	329
141, 568	Lahman, J., Panora, Iowa. Thimble-skein for vehicle-wheels.....	Aug. 5, 1873	137	44	4	146
140, 715	Lahman, W., Wellsville, Ohio. Plow-clevis.....	July 8, 1873	331	112	4	47
140, 144	Laidley, T. T. S., Watertown, Mass. Cartridge for fire-arms.....	June 24, 1873	664	208	3	694
137, 085	Lakey, J. H., Turner, assignor to G. W. Billings, Chicago, Ill. Railway-frogs.....	Mar. 25, 1873	671	223	3	329
141, 362	Lakins, G., East Norwalk, Ohio. Fence-post stub.....	July 29, 1873	963	313	4	122
142, 246	Lakins, G., East Norwalk, and L. N. Lakins, Toledo, Ohio. Wire fence.....	Aug. 26, 1873	776	255	4	225
	Lakins, L. N. (See Lakins, G. & L. N.)					
144, 210	Lalor, T., assignor to E. Crossman, Toronto, Canada. Bolt for prison-doors.....	Nov. 4, 1873	36	11	4	481
	Lamarche, C. D. (See O'Brien, J., assignor.)					
144, 030	Lamarre, A., Paris, France, assignor to G. Washburne. Pyrotechnic signal.....	Oct. 28, 1873	610	.....	4	458
	Lamason, B. P. (See Murray & Lamason)					
135, 716	Lamason, B. P., Milton, Pa. Safety-truck for railway-cars.....	Feb. 11, 1873	308	98	3	164

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135, 717	Lamason, B. P., Milton, assignor of one-half interest to W. J. Brundred, Oil City, Pa. Railway freight-car	Feb. 11, 1873	309	98	3	164
138, 505	Lamb, C., and T. S. Frazier, Clinton, Iowa. Machine for trimming lumber	May 6, 1873	30	10	3	500
140, 281	Lamb, D. M., Strathroy, Canada. Production of water-proof gum	June 24, 1873	779		3	703
140, 282	Same..... same	June 24, 1873	780		3	704
140, 283	Same..... Preparing water-proof gum from flaxseed, &c.	June 24, 1873	780		3	704
144, 621	Same..... Apparatus for purifying and filtering oils	Nov. 18, 1873	396	132	4	533
144, 622	Same..... Compound vulcanizable gum	Nov. 18, 1873	396		4	533
144, 623	Same..... Treating vulcanizable gums and caoutchouc	Nov. 18, 1873	397		4	533
	Lamb, J. W. (See Priest, C. W., assignor.)					
137, 848	Lamb, J. W., Troy, N. Y. Handle for sheet-metal ware	Apr. 15, 1873	525	164	3	424
135, 715	Lamb, L. L., Chelsea, Mass. Tool-holder	Feb. 11, 1873	308	98	3	164
141, 934	Lamb, L. L., assignor to self and S. K. Lovewell, Chelsea, Mass. Tool-receptacle	Aug. 19, 1873	488	161	4	192
142, 706	Lamb, N. C., Wyandotte, Mich. Corn-planter	Sept. 9, 1873	342	115	4	281
140, 050	Lamb, S. T., Boston, Mass. Fiber-cleaning machinery	June 17, 1873	559	177	3	677
142, 029	Lambart, R. C., Quincy, Mass., assignor to the Shoe-Machinery Manufacturing Company. Machinery for trimming the sole-edges of boots and shoes	Aug. 19, 1873	568	188	4	198
143, 914	Same..... Machine for compressing and punching heel-blanks	Oct. 21, 1873	485	{ 163 164 }	{ 4 4 }	438
145, 430	Lambart, R. C., Quincy, assignor to Tapley Heel-Burnishing Machine Association, Boston, Mass. Machine for burnishing heels of boots and shoes	Dec. 9, 1873	351	117	4	626
	Lambert, E. A., et al. (See Sinclair, J. D., assignor) (Reissue.)					
5, 661	Lambert, R. C., Quincy, Mass., assignor by mesne assignment to the Shoe-Machine Manufacturing Company. Machine for trimming the edges of boot and shoe soles (Reissue.)	Nov. 18, 1873	564	191	4	547
135, 133	Lambert, R. C., Quincy, assignor by mesne assignment to N. C. Lombard, trustee, Boston, Mass. Lasting boots and shoes	Jan. 21, 1873	586	190	3	82
141, 281	Lambert, W. B., Geneseo, Ill. Sign	July 29, 1873	882	289	4	116
135, 564	Lamberton, W. W., and D. R. Lemman, New Orleans, La. Car-starter	Feb. 4, 1873	156	50, 51	3	140
	Lamdin, T. J., Baltimore, Md. Mail-bag (Extension)	May 10, 1873			3	497
23, 924	Same..... same (Disclaimer filed)	May 9, 1873			3	497
135, 565	Lamey, P. H., Wiconisco, Pa. Coal-car elevator	Feb. 4, 1873	157	51	3	140
141, 148	Same..... same	July 22, 1873	742	245	4	97
	La Moree, J. L. (See Hamilton, W., assignor.)					
138, 899	La Mothe, B. J., Detroit, Mich. Railway-car seat	May 13, 1873	392	123	3	540
	Lamoureux, D., Chicago, Ill. Manufacturing corsets and bustles (Extension)	Jan. 4, 1873			2	729
146, 080	Lamplugh, J., Philadelphia, Pa. Composition for preserving leather	Dec. 30, 1873	958		4	709
	Land, A. (See Fling & Land.)					
137, 779	Land, G., Hillsdale, Mich. Dining-table	Apr. 15, 1873	466	146	3	419
146, 008	Land, T. R., Grass Valley, Cal. Car-coupling	Dec. 30, 1873	897	291	4	704
6, 833	Landenberger, C. H., Philadelphia, Pa. Fabric (Design)	Sept. 2, 1873			4	241
6, 695	Same..... Striped fabric (Design)	June 3, 1873			3	608
145, 216	Landenberger, C. H., and H. Atkinson, assignors to M. Landenberger & Co., Philadelphia, Pa. Loom-shedding mechanism	Dec. 2, 1873	159	55	4	598
6, 702	Landenberger, M., Philadelphia, Pa. Cape (Design)	June 10, 1873			3	640
6, 869	Same..... same (Design)	Sept. 2, 1873			4	241
6, 629	Landenberger, M., jr., Philadelphia, Pa. Cape (Design)	May 6, 1873			3	497
6, 630	Same..... same (Design)	May 6, 1873			3	497
6, 631	Same..... same (Design)	May 6, 1873			3	497
6, 632	Same..... same (Design)	May 6, 1873			3	497
6, 633	Same..... same (Design)	May 6, 1873			3	497
6, 634	Same..... same (Design)	May 6, 1873			3	497
6, 635	Same..... same (Design)	May 6, 1873			3	497
6, 641	Same..... same (Design)	May 6, 1873			3	497
6, 642	Same..... same (Design)	May 6, 1873			3	497
6, 643	Same..... same (Design)	May 6, 1873			3	497
6, 651	Same..... Stocking-fabric (Design)	May 20, 1873			3	558
6, 652	Same..... same (Design)	May 20, 1873			3	558
6, 659	Same..... same (Design)	May 20, 1873			3	559
6, 660	Same..... Cape (Design)	May 20, 1873			3	559
6, 681	Same..... same (Design)	May 27, 1873			3	586
6, 689	Same..... Stocking-fabric (Design)	May 27, 1873			3	586
	Landenberger, M. & Co. (See Landenberger & Atkinson, assignors.)					
	Same..... (See Phipps, J., assignor.)					
	Same..... same (Design)					
	Lander, P. C. (See Alling, D. S., assignor.)					
	Landers, Frary & Clarke. (See Turnbull & Webb, assignors.)					
5, 662	Landfear, W. R., assignor by mesne assignment to the Hartford Eyelet Company, Hartford, Conn. Eyelet-making machine (Reissue)	Nov. 18, 1873	565	192	4	547
	Landis, D. N., jr. (See Dittman, C., assignor.)					
5, 511	Landis, I. L., Lancaster, Pa. Fence (Reissue)	July 29, 1873	1,020	330	4	126
139, 797	Same..... Shirt-bosom support	June 10, 1873	336	104	3	651
145, 662	Same..... Device for detaching horses	Dec. 16, 1873	563	185	4	655
140, 510	Landis, J. K., York Township, Ohio. Ribbon-case	July 1, 1873	144	49	4	20
136, 075	Landrum, Z. P., Columbus, Miss. Horse-power	Feb. 18, 1873	631	207	3	203
141, 363	Same..... same	July 29, 1873	964	314	4	122
	Lane, D. (See Marshall, M., assignor.)					
136, 656	Lane, D., assignor to self, P. P. Pitkin, and J. W. Brock, Montpelier, Vt. Head-block for saw-mills	Mar. 11, 1873	281	94	3	277
136, 657	Same..... Head-block for saw-mills	Mar. 11, 1873	282	95	3	277
5, 266	Lane, F. A., Cleveland, Ohio, assignor by mesne assignment to self, L. S. Lane, and E. Kendall. Stuffing for mattresses (Reissue)	Feb. 4, 1873	216	67	3	144
5, 379	Lane, F. A., Cleveland, Ohio, assignor by mesne assignment to self and L. S. Lane, Swazey, N. H., and E. Kendall, Cleveland, Ohio. Stuffing for mattresses (Reissue)	Apr. 29, 1873	1,111	351	3	489
	Lane, J. G. (See Lane, W. J., assignor.)					
7, 022	Lane, J. G. & W. J., Millbrook, N. Y. Frame or stand of grinding-mills (Design)	Dec. 9, 1873			4	614
134, 902	Lane, J. W., Bristol, England, assignor to E. Brimble, London, England. Corset	Jan. 14, 1873	376	119	3	50
	Lane, L. S., et al. (See Lane, F. A., assignor) (Reissue)					
141, 364	Lane, F. W., Mendocino, Cal. Washing-fluid	July 29, 1873	965		4	122
6, 699	Lane, S., jr., Englewood, N. J. Ale-pump (Design)	June 10, 1873			3	640
6, 700	Same..... same (Design)	June 10, 1873			3	640
143, 769	Same..... Pump	Oct. 21, 1873	364	121	4	428
145, 507	Lane, T., Whitesburgh, Tenn. Fly-trap	Dec. 16, 1873	431	140	4	644
	Lane, T. W., Meredith, N. H. Steam-pressure gage (Extension)	Feb. 22, 1873			3	156
5, 320	Same..... Steam-gage (Reissue)	Mar. 11, 1873	410	{ 135 136 }	{ 3 3 }	287

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23, 032	Lane, T. W., Meredith, N. H. Steam-pressure gage..... (Disclaimer filed) ..	Feb. 15, 1873			3	156
145, 576	Lane, W. J. (See Lane, J. G. and W. J.)					
	Lane, W. J., assignor to self and J. G. Lane, Millbrook, N. Y. Coffee-roaster.....	Dec. 16, 1873	491	161	4	649
140, 051	Lane, Z. M. (See Hayden, C. M., assignor.)					
	Laner, J. E., New York, N. Y. Manufacturing crystalline acid phosphate of lime for yeast-powders.....	June 17, 1873	662	.....	3	678
142, 346	Lang & Lauster. (See Lang, G. P., jr., assignor.)					
	Lang, C., assignor of one-half interest to A. H. Nimochs, Ypsilanti, Mich. Whip-socket.....	Sept. 2, 1873	21	7	4	244
139, 586	Lang, C. A., Palmyra, Me. Corn-husker.....	June 3, 1873	123	41	3	619
136, 076	Lang, G. P., jr., assignor to Lang & Lauster, Allegheny, Pa. Molasses pitcher-top.....	Feb. 18, 1873	631	207	3	203
137, 139	Same.....	Mar. 25, 1873	716	237	3	332
135, 922	Lang, J. C., Washington, D. C., assignor of three-fourths interest to P. B. Fouke, New Orleans, La. Floating fire-engine.....	Feb. 18, 1873	501	163	3	193
142, 571	Lang, J. G., Pittsburgh, Pa. Furnace for the manufacture of oxide of zinc.....	Sept. 9, 1873	231	75	4	272
	Langdon, H. S. (See Irwin & Langdon.)					
	Langdon, L. W. (See Robertson, J., assignor.)					
139, 678	Lange, F. A., Glashutte, Saxony. Manufacture of springs for watches and other time-pieces of aluminium compounds.....	June 10, 1873	219	.....	3	643
139, 398	Lange, R., Baltimore, Md. Lamp-extinguisher.....	May 27, 1873	863	276	3	598
141, 648	Langellier, A., Concord, N. H. Car-coupling.....	Aug. 12, 1873	225	71	4	161
143, 083	Same..... Car-brake.....	Sept. 23, 1873	674	232	4	329
144, 624	Same..... Car-coupling.....	Nov. 18, 1873	398	133	4	533
134, 682	Langen, E., Cologne, Pruss.a. Manufacture of loaf-sugar.....	Jan. 7, 1873	174	57	3	20
144, 114	Langenau, W. C., assignor of one-half interest to J. A. Lannert. Combination-padlock.....	Oct. 28, 1873	679	225	4	464
138, 167	Langenbach, R., New York, N. Y. Wash-boiler.....	Apr. 22, 1873	814	259	3	457
6, 889	Langham, T., assignor to T. Dolan and R. Williams, jr., Philadelphia, Pa. Knitted fabric..... (Design) ..	Sept. 16, 1873	.....	.....	4	296
	Langlotz, L. (See Gahren & Langlotz.)					
	Lanier, G. P. (See Gense, C., assignor.)					
139, 399	Lannay, E., Lima, Ohio. Spark-arrester.....	May 27, 1873	864	276	3	598
	Lannert, J. A. (See Langenau, W. C., assignor.)					
137, 554	Lansdowne, S., assignor to self and R. Davis, Sharon, Pa. Metallurgic furnace-lining.....	Apr. 8, 1873	257	79	3	389
142, 516	Lanson, R. B., London, England. Apparatus for ironing and pressing garments.....	Sept. 2, 1873	174	57	4	286
142, 857	Lantis, H. T., and N. Davis, Atlanta, Idaho. Elevated wire-way.....	Sept. 16, 1873	479	163	4	303
143, 454	Lapham, A., assignor to self and O. W. Leonard, Paterson, N. J. Shears.....	Oct. 7, 1873	48	17	4	385
	Lapham, N. D., et al. (See Arndt, A. F. R., assignor.)					
	Same..... (See Cliff & Martin, assignors.)					
145, 301	Lapham, R., assignor to H. Condron, New York, N. Y. Fountain brush.....	Dec. 9, 1873	239	81	4	617
134, 683	Lappin, H., Troy, N. Y., assignor of one-half interest to P. Z. Marsh, Lansingburgh, N. Y. Reservoir cooking-stove.....	Jan. 7, 1873	175	57	3	20
	Larabee, B. F., et al. (See Maloy, J. W., assignor.)					
	Lardner, H. (See Wheeler, R. B., assignor.)..... (Reissue)					
	Larduskey, W. H. H. (See Onion & Larduskey.)					
144, 851	Larer, D., assignor of one-third interest to S. E. Griscom, Pottsville, Pa. Diamond mill-stone dressing machine.....	Nov. 25, 1873	601	204	4	560
	Large, A. (See Hutchins, C., assignor.)					
135, 718	Large, J., Gill Hall, Pa. Driven well.....	Feb. 11, 1873	310	98	3	164
	La Rhett, S. (See Burgess & La Rhett.)					
137, 780	Larkin, C. (See Terry, Case & Larkin.)					
	Larkin, J. T., Halifax, Nova Scotia. Skate.....	Apr. 15, 1873	467	146	3	419
	Larkin, W. D. F. (See Onion & Larduskey, assignors)					
141, 006	Larned, G. C., Worcester, Mass. Metal-planing machine.....	July 22, 1873	615	208	4	87
145, 508	Larson, P. J., Chicago, Ill. Sofa-bedstead.....	Dec. 16, 1873	432	140	4	644
144, 461	La Rue, S. H., Allentown, Pa. Base-burning stove.....	Nov. 11, 1873	251	84	4	510
	Lartigue, H. (See Digney, J. D. and F., Lartigue & Forest.)					
5, 398	Lascell, G. W., Syracuse, N. Y., assignor to self and H. Robinson, Jersey City, N. J. Steam boiler and furnace..... (Reissue) ..	May 6, 1873	241	75	3	517
141, 649	Lash, J. S., Philadelphia, Pa. Cherry-stoner.....	Aug. 12, 1873	225	71	4	161
145, 663	Same..... Box.....	Dec. 16, 1873	564	185	4	655
	Lassiter, D. W. (See McDuffey & Jaques, assignors.)					
142, 481	Lassoe, V. F., Brooklyn, assignor to V. F. Lassoe and G. F. Meyer, New York, N. Y. Compensating spring-balance for safety-valves.....	Sept. 2, 1873	142	47	4	253
141, 443	Latchaw, D., Barkeyville, Pa. Bee-hive.....	Aug. 5, 1873	29	9, 10	4	137
145, 111	Latham, B., Westminster, England. Cleaning sewers.....	Dec. 2, 1873	64	.....	4	590
	Latham, C. H., et al. (See Dudley, G. D., assignor.)					
	Same..... (See Sherwood, D., assignor.)					
	Latham, C. H. (See Woods & Sherwood, assignors)..... (Reissue.)					
6, 933	Lathrop, B. L., assignor to self and J. Daniels, New Haven, Conn. Lathe-dog. (Design) ..	Oct. 7, 1873	.....	.....	4	380
139, 067	Lathrop Combination Sewing-Machine Company. (See Lathrop, L. W., assignor.)					
	Lathrop, L. W., Philadelphia, Pa., assignor to Lathrop Combination Sewing-Machine Company, New York, N. Y. Sewing-machine.....	May 20, 1873	547	{ 172 } { 173 }	{ 3 }	565
	Lathrop, T. A., et al. (See Ferguson, W., assignor.)					
	Lathrope, H. (See Weirick & Lathrope.)					
137, 694	Latimer, C., Saint Joseph, Mich. Safety-guard for railways.....	Apr. 8, 1873	378	117	3	399
145, 577	Latourette, D. L., New York, N. Y. Device for cleaning steam-generators.....	Dec. 16, 1873	491	162	4	649
137, 086	La Tourette, H. L., New Orleans, La. Hand-truck.....	Mar. 25, 1873	672	223	3	329
	Latrobe, C. H. (See Bender, Latrobe & Smith.)					
139, 068	Latschaw, H., McKnightstown, Pa. Apparatus for detaching horses.....	May 20, 1873	550	173	3	355
	Latta, E. G. (See Thornton & Latta.)					
134, 552	Latta, F., Cincinnati, Ohio. Fire-alarm signal-box.....	Jan. 7, 1873	46	14	3	11
142, 637	Same..... Fire-extinguisher.....	Sept. 9, 1873	283	93	4	277
137, 006	Latta, F., and W. H. Hughes, Cincinnati, Ohio. Combined fire-plug and cistern.....	Mar. 18, 1873	586	195	3	311
143, 084	Laudermilch, J. K., Lebanon, Pa. Jeweler's drilling device.....	Sept. 23, 1873	675	232	4	329
141, 879	Laughland, G. L., New York, N. Y. Wire-tie for baling hay, &c.....	Aug. 19, 1873	444	145	4	188
144, 463	Laughlin, J. L., Peru, Ill. Plow.....	Nov. 11, 1873	253	85	4	510
135, 993	Laughlin, J. M., Boston, Mass. Horseshoe-nail machine.....	Feb. 18, 1873	558	185	3	197
142, 403	Same..... Punching-machine.....	Sept. 2, 1873	74	24	4	248
135, 348	Laurent, J., New York, and J. Menegay, Brooklyn, N. Y. Spring for watch-cases.....	Jan. 28, 1873	798	258	3	112
143, 167	Lawrie, C. W., Philadelphia, Pa. Stop-cock.....	Sept. 23, 1873	735	253	4	334
	Lauth, B., Howard, Pa. Manufacture of iron..... (Extension) ..	Aug. 23, 1873	.....	.....	4	135
145, 431	Lauerty, W. A., Philadelphia, Pa. Egg-carrier.....	Dec. 9, 1873	352	118	4	626
138, 506	Lavies, H., and H. Stiefvater, Greenfield, Wis. Wagon-body.....	May 6, 1873	31	11	3	500
	Lavinia, W. H. (See Crane & Lavinia.)					

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137, 935	Lavo, J. J., assignor by mesne assignment to United States Chemical-Compound Company, Wyandotte, Kans. Compound for preventing incrustation in steam-boilers.....	Apr. 15, 1873	596		3	430
139, 069	Law, C., Pittston, Pa. Screw-driver.....	May 20, 1873	551	173	3	565
5, 503	Law, H., Chatham, N. J. Paper-cutting machine..... (Reissue).....	July 29, 1873	1, 011	{ 328 329 }	4	125
135, 649	Law, J., London, Canada. Tar or petroleum burner.....	Feb. 11, 1873	249	79	3	159
134, 753	Law, R., Toledo, Ohio. Machine for bundling shingles.....	Jan. 14, 1873	243	79	3	40
134, 810	Lawler, M., Holyoke, assignor of one-half interest to O. S. Greenleaf, Springfield, Mass. Feed-regulator for calender-rolls.....	Jan. 14, 1873	295	95	3	44
140, 205	Lawler, J., New York, N. Y. Heating-range.....	June 24, 1873	715	225	3	698
138, 260	Lawrence, B., Lowell, Mass. Milling machine.....	Apr. 29, 1873	927	{ 292 293 }	3	474
145, 302	Lawrence, E. P., Worcester, Mass. Folding-coop.....	Dec. 9, 1873	240	81	4	617
142, 482	Lawrence, F., Philadelphia, Pa. Blast and cupola furnace.....	Sept. 2, 1873	143	47	4	253
138, 808	Lawrence, H., Fredericton, Canada. Scroll-sawing machine.....	May 13, 1873	313	97	3	533
	Lawrence, L. L. (See Fulghum & Lawrence.)					
	Lawrence, P. H. (See Buckley & Lawrence.)					
134, 605	Lawrence, W., and J. Sanders, New Albany, Ind. Automatic fan.....	Jan. 7, 1873	101	33	3	15
135, 134	Lawrence, W. S., Winchester, Ky. Animal-trap.....	Jan. 21, 1873	587	190	3	82
141, 569	Same..... Hemp-brake.....	Aug. 5, 1873	138	44	4	146
143, 168	Laws, A. D., assignor to the Belknap and Burnham Manufacturing Company, Bridgeport, Conn. Machine for tapping gas and water fittings.....	Sept. 23, 1873	736	{ 253 254 }	4	334
145, 806	Lawson, B. S., New York, N. Y. Steam-pump.....	Dec. 23, 1873	697	229	4	678
	Lawson, W. H. (See Rapp, B. R., assignor.)					
	Lawton, E. R. (See Jeralds, S. E., assignor.)					
135, 349	Lawyer, R., Pittsburgh, Pa. Wash-boiler.....	Jan. 28, 1873	799	258	3	112
144, 774	Same..... same.....	Nov. 18, 1873	523	177	4	544
	Layton, J. E. (See Johnson & Layton.)					
145, 112	Lazarevitch, C., Brooklyn, N. Y. Grain-conveyor.....	Dec. 2, 1873	65	21	4	590
138, 507	Lazarus, M. G., Pittston, Pa. Folding-screen.....	May 6, 1873	31	11	3	500
	Lazarus, Moses, & Co. (See Ansell, A. D., assignor.)					
139, 719	Lazell, A. E., West Meriden, Conn. Curtain-fixture.....	June 10, 1873	263	82	3	646
144, 396	Lea, P., Goliad, Tex. Compound of bitumen, ore, &c.....	Nov. 11, 1873	198	.....	4	506
144, 397	Same..... Mixing mineral and fossil substances with bituminized clay to form a plastic material.....	Nov. 11, 1873	198	.....	4	506
141, 509	Leach, A., Lynn, Mass. Horseshoe.....	Aug. 5, 1873	89	27	4	142
143, 169	Leach, D. A., Bloomington, Ind. Animal-trap.....	Sept. 23, 1873	738	254	4	335
142, 113	Leach, H., Camanche, Iowa. Plow-scraper.....	Aug. 26, 1873	664	218	4	216
	Leach, J. (See Holt & Leach.)					
145, 578	Leach, S. F., Chelsea, Mass. Hand-punch for metal.....	Dec. 16, 1873	492	162	4	649
140, 284	Leach, S. L., assignor to H. R. Ellis, Corry, Pa. Bed-bottom.....	June 24, 1873	781	247	3	704
	Learned, E. A. (See Milton, C. C., assignor.)					
	Leasure, J. A. (See Barnes & Leasure.)					
140, 378	Leaver, J., and J. Wock, Canal Fulton, Ohio. Rotary steam-engine.....	July 1, 1873	37	12	4	11
135, 719	Leavitt, C., Cleveland, Ohio. Combined sod-cutter and land-roller.....	Feb. 11, 1873	311	99	3	164
141, 650	Leavitt, C. P., Newark, N. J. Apparatus for feeding fuel to furnaces.....	Aug. 12, 1873	226	71	4	161
	Leavitt, J. H., et al. (See Forrest, H. E., assignor.)					
135, 434	Leckenby, H. B., Kalamazoo, Mich. Wheel for vehicles.....	Feb. 4, 1873	39	12	3	130
140, 145	Ledbetter, T., Detroit, Mich. Steuch-trap.....	June 24, 1873	664	209	3	694
135, 433	Ledoux, A. R., Cornwall Landing, N. Y. Boxes for preserving cake and bread.....	Feb. 4, 1873	39	11	3	130
5, 371	Lee, A., White Marsh, Pa. Operating screw-propellers..... (Reissue).....	Apr. 22, 1873	882	278	3	462
5, 351	Lee, A. K., Galveston, Tex. Distilling turpentine..... (Reissue).....	Apr. 15, 1873	649	205	3	434
137, 849	Same..... Filter for cane-juice oils and other dense liquids.....	Apr. 15, 1873	526	164	3	424
138, 508	Same..... Turpentine-still.....	May 6, 1873	32	11, 12	3	500
138, 809	Same..... Resin box and cooler.....	May 13, 1873	314	97	3	533
138, 810	Same..... Apparatus for steaming and cleaning barrels, &c.....	May 13, 1873	315	97	3	533
139, 402	Same..... Bleaching resin.....	May 27, 1873	866	277	3	598
	Lee, C. A. (See Crane, D., assignor.)					
139, 253	Lee, C. C., Falls Church, Va. Harness-buckle.....	May 27, 1873	733	232	3	588
139, 400	Lee, D., Boston, Mass. Apparatus for drying sugar, salt, &c.....	May 27, 1873	865	277	3	598
139, 401	Same..... same.....	May 27, 1873	865	277	3	598
5, 403	Lee, E. F., Bayonne, N. J., assignor of one-third interest to J. Wienhold, New York, N. Y. Button-fastening..... (Reissue).....	May 13, 1873	455	143	3	545
145, 432	Lee, G. D., assignor of two-thirds interest to J. M. King and H. W. Swezey, Brookhaven, N. Y. Bung-faucet.....	Dec. 9, 1873	353	118	4	626
	Lee, G. S. (See West & Lee.)					
	Same..... same..... (Reissue).....					
137, 781	Lee, G. S., assignor to self and P. West, Worcester, Mass. Boot.....	Apr. 15, 1873	468	146	3	419
140, 206	Lee, H. T., Chicago, Ill. Toy.....	June 24, 1873	715	225	3	698
	Lee, J. (See Ellis, Hoffman & Lee.)					
	Lee, J. (See Smith & Lee.)					
145, 953	Lee, J., assignor of two-thirds interest to J. J. Rich and J. Gallagher, Saint Louis, Mo. Wrench.....	Dec. 30, 1873	851	277	4	701
145, 433	Lee, J. W., and J. W. Davis, Washington, D. C. Disinfecting compound.....	Dec. 9, 1873	353	.....	4	626
138, 092	Lee, M. C., New York, N. Y. Lock-hinge.....	Apr. 22, 1873	754	239	3	452
	Lee, N. (See Decker & Lee.)					
142, 404	Leech, R. L., Winterset, Iowa. Movable cloth-plate for sewing-machines.....	Sept. 2, 1873	75	24	4	248
	Leedom, Shaw & Stewart. (See Crabtree, J., assignor)..... (Design.)					
	Same..... (See Kerr, H. P., assignor)..... (Design.)					
139, 166	Leeds, G. H., West Chester, and C. N. Thorpe, Philadelphia, Pa. Striking-works of clocks.....	May 20, 1873	644	201	3	573
	Leeds, J. (See Steel & Austin, assignors.)					
146, 081	Leeds, L., assignor of one-half interest to E. W. and A. W. Sholes, New London, Conn. Nut-lock.....	Dec. 30, 1873	958	309	4	709
	Lees, E. F. (See Lees, H. C., assignor.)					
144, 115	Lees, H. C., assignor to E. F. Lees, Camden, N. J. Tassel-top.....	Oct. 28, 1873	680	225	4	464
138, 662	Leet, D. W., and W. C. Shields, Bellaire, Ohio. Slate-washer.....	May 6, 1873	173	55	3	511
138, 900	Lefebvre, A., San Francisco, Cal. Feathering paddle-wheels.....	May 13, 1873	393	123	3	540
144, 990	Leffler, J., Rochester, N. Y. Drain-tile.....	Nov. 25, 1873	713	241	4	570
137, 936	Legab, C., Pittsburgh, Pa. Bed-bug trap for bedsteads.....	Apr. 15, 1873	596	188	3	430
136, 658	Legg, C., Malcom, assignor of one-half interest to H. W. Wigton, De Soto, Iowa. Composition for molding plastic articles.....	Mar. 11, 1873	283	.....	3	277
141, 651	Legg, J., Rushville, N. Y. Horseshoe's rest.....	Aug. 12, 1873	227	71	4	161
138, 261	Leggett, C. H., Elizabeth, N. J. Match-safe.....	Apr. 29, 1873	928	293	3	474
143, 770	Leggett, E. W., New York, N. Y. Process of lining oil-barrels with glue.....	Oct. 21, 1873	364		4	428

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 663	Leggo, W. A., Montreal, Canada. Photographic apparatus.....	May 6, 1873	173	55, 56	3	511
138, 664	Same..... Canal-boat.....	May 6, 1873	175	56	3	512
138, 665	Same..... Propulsion by gas-explosion.....	May 6, 1873	176	56	3	512
145, 509	Lehman, D. A., Wakarusa, Ind., assignor to self and J. D. Gehring, Constantine, Mich. Register for tubular knitting-machine.....	Dec. 16, 1873	433	141	4	644
135, 566	Lehman, W., Lexington, Mo. Bee-hive.....	Feb. 4, 1873	159	51	3	140
143, 515	Lehmann, C. K., Savannah, Ohio. Seat for carriages and wagons.....	Oct. 7, 1873	97	34	4	388
136, 840	Lehndorff, R., Detroit, Mich. Composite roofing.....	Mar. 18, 1873	447	.....	3	300
143, 288	Lehnen, F., Marquette, Mich. Folding camp-baker.....	Sept. 30, 1873	845	291	4	360
138, 567	Lehner, J., Galena, Ill. Automatic fan.....	May 6, 1873	91	29	3	505
144, 991	Lehnis, C. H., Philadelphia, assignor of one-half interest to A. Leschorn, Pittsburgh, Pa. Automatic fire-alarm.....	Nov. 25, 1873	714	241	4	571
136, 924	Leidy, A. C., et al. (See Snyder, B., assignor.)	Mar. 18, 1873	517	170	3	305
137, 219	Leigh, J. W., Norfolk, Va. Cotton-harvester.....	Mar. 25, 1873	791	261	3	338
138, 509	Leigh, W., Bridgeport, Conn. Musical-instrument.....	May 6, 1873	36	12	3	500
139, 587	Leighton, D. R. (See Leighton, J. T. & D. R.)	June 3, 1873	124	41	3	619
142, 923	Leighton, J. E., Lowell, Mass. Lamp.....	Sept. 16, 1873	531	182	4	308
145, 664	Leighton, J. T. & D. R., New Haven, Conn. Sleeping-car.....	Dec. 16, 1873	564	185, 186	4	655
141, 935	Leighton, W., jr., Wheeling, W. Va. Glass-furnace.....	Aug. 19, 1873	488	161	4	192
144, 341	Leinroth, G., Philadelphia, Pa. Pattern for cutting the uppers of shoes.....	Nov. 4, 1873	140	47	4	490
139, 900	Leisenring, H. G. (See Howard, W. T., assignor.) (Reissue.)	June 17, 1873	437	136	3	667
145, 217	Leisher, B. A. (See Leisher, G. W., assignor.)	Dec. 2, 1873	160	55	4	598
138, 031	Leisher, G. W., New Wilmington, assignor of one-half interest to B. A. Leisher, Renovo, Pa. Harvester.....	Apr. 22, 1873	701	222	3	448
136, 604	Leiter, J., Vienna, Austria, assignor to F. G. Otto, and J. Reynnders, New York, N. Y. Hypodermic syringe.....	Mar. 11, 1873	238	.....	3	273
137, 220	Leland, H. S., Canton, Ohio. Universal coupling.....	Mar. 25, 1873	791	261	3	338
145, 063	Lemare, R., New York, N. Y. Artificial stone.....	Apr. 15, 1873	469	147	3	419
140, 582	Lemman, D. R. (See Lamberton & Lemman.)	Sept. 30, 1873	846	291	4	360
140, 582	Lengelée, C. A. J., Paris, France. Apparatus for shearing animals.....	July 8, 1873	220	74	4	37
137, 782	Lenhart, P. (See Scheider, J. F., assignor.)	Dec. 2, 1873	21	7, 8	4	587
143, 289	Lenhart, W. (See Morris & Lenhart.)	July 8, 1873	219	73, 74	4	37
140, 583	Lentz, M. A. (See Royal, Lentz & Deibert.)	May 10, 1873	.....	.....	3	497
145, 063	Leonard, A., Newell's Run, Ohio. Cultivator.....	Feb. 11, 1873	406	131	3	171
140, 582	Leonard, D. M., La Crosse, Wis. Combined shutter-worker and blind-operator.....	Sept. 9, 1873	232	76	4	272
145, 063	Leonard, F., Cleveland, Ohio. Chain-machine.....	Jan. 14, 1873	296	95	3	44
140, 582	Leonard, G. F., Newport, Vt., assignor to self and J. P. Lindsay, New York, N. Y. Sheet-metal roofing.....	Nov. 18, 1873	523	178	4	544
135, 823	Leonard, H. G., Taunton, Mass. Cooking-stove..... (Extension.)	Nov. 18, 1873	524	178	4	544
142, 572	Leonard, I. D. (See Mayhew & Leonard.)	May 27, 1873	868	278	3	599
134, 811	Leonard, J., Attica, Ohio. Knitting-machine.....	Nov. 18, 1873	525	178	4	544
144, 775	Leonard, J. D., assignor of one-half interest to R. E. Hoyt, Cleveland, Ohio. Self-acting coal-car brake.....	June 3, 1873	23	7	3	611
144, 776	Leonard, J. P., and G. Hancock, Oroville, Cal. Sediment-collector and blow-off for steam-boilers.....	Apr. 29, 1873	1,060	333	3	485
139, 403	Leonard, O. W. (See Lapham, A., assignor.)	Mar. 4, 1873	75	26	3	251
144, 777	Leonard, W. A. (See Babcock, Leonard & Crane.)	May 13, 1873	394	124	3	540
139, 470	Leonard, T. D., assignor of two-thirds interest to J. D. Johnson and B. C. Drury, Waco, Tex. Cotton-press.....	Feb. 25, 1873	862	277	3	233
134, 684	Same..... Bale-tie clamp.....	Nov. 4, 1873	37	11	4	481
140, 836	Lerew, H., Panora, Iowa. Harness-saddle pad.....	Dec. 27, 1873	.....	.....	4	671
134, 754	Lertora, J. (See Geisler, K., assignor.)	Aug. 5, 1873	139	44	4	146
141, 444	Leschorn, A. (See Lehnis, C. H., assignor.)	Oct. 7, 1873	98	35	4	388
141, 510	Leshner, H. S., New York, N. Y. Bottle-stopper.....	Sept. 16, 1873	.....	.....	4	296
136, 440	Lesley, A. M., New York, N. Y. Apparatus for cooling rooms.....	Jan. 7, 1873	176	47	3	20
138, 901	Leslie, A. M., Chicago, Ill. Thread-cutter for sewing-machines.....	July 15, 1873	440	150	4	63
136, 327	Leslie, J. W., Cairo, Ill. Saw-set.....	Jan. 14, 1873	244	80	3	40
144, 211	Leslie, J. W., and G. R. Smith, Cairo, Ill. Veneer-cutting machine.....	Aug. 5, 1873	31	10	4	137
141, 570	Leslie, L. N., Leominster, Mass. Oil-cup support for sewing-machines.....	Aug. 5, 1873	89	28	4	142
143, 516	Lessig, S., sr., Reading, Pa. Grain-separator.....	Jan. 7, 1873	176	.....	3	20
6, 883	Lessing, S., Reading, Pa. Horse hay-rake..... (Extension.)	Jan. 28, 1873	.....	.....	3	100
134, 684	Lessor, R. J., and J. B. Shambo, Brandon, Vt. Securing wheels to axles.....	Aug. 19, 1873	489	161	4	192
137, 850	Lester, J. S., Atlanta, Ga., assignor to self and A. S. Worsham. Running-gear for railway cars.....	Apr. 29, 1873	1,061	334	3	485
140, 928	Lester, W. (See Peck, C. O., assignor.)	Apr. 15, 1873	527	164	3	424
137, 221	Letchworth, J., Buffalo, N. Y. Tug-clip..... (Design.)	July 15, 1873	528	176	4	70
139, 588	Same..... Bridle-bit.....	Mar. 25, 1873	792	262	3	338
138, 902	Letsinger, H. C., assignor to E. C. Burt, New York, N. Y. Ladies' gaiter shoe.....	June 3, 1873	125	42	3	619
134, 606	Letton, R. E., Quincy, Ill. Reed-organ.....	May 13, 1873	394	124	3	540
141, 510	Letton, R. E., assignor of one-half interest to L. M. Locke, Quincy, Ill. Organ-coupler.....	Jan. 7, 1873	102	33	3	15
134, 685	Letton, R. E., Quincy, Ill. Reed-organ.....	May 17, 1873	.....	.....	3	527
6, 374	Levallois, H. A., Paris, France. Manufacture of steel.....	Sept. 23, 1873	676	232	4	329
141, 936	Le Van, W. B., Philadelphia, Pa. Governor-base..... (Design.)	Feb. 25, 1873	862	278	3	233
138, 413	Same..... Furnace-grate.....	.....	.....	.....	.....	.....
140, 928	Levassieur, E. I., Paris, France, assignor to H. Witzemann, Pforzheim, Baden. Machine for making links for ornamental chains.....	.....	.....	.....	.....	.....
137, 850	Leverich, E. B. (See Pine, J., assignor.)	.....	.....	.....	.....	.....
140, 928	Levy, A. (See Levy, J., T., and A.)	.....	.....	.....	.....	.....
137, 221	Levy, J., T., and A., New York, N. Y. Machine for cutting and perforating cigars.....	.....	.....	.....	.....	.....
139, 588	Levy, T. (See Levy, J., T., and A.)	.....	.....	.....	.....	.....
138, 902	Lewando, C., Cambridge, Mass. Metallic roofing.....	.....	.....	.....	.....	.....
134, 606	Lewellin, M., Bergen, N. Y. Cultivator.....	.....	.....	.....	.....	.....
141, 510	Lewis, A., Minneapolis, Minn. Running gear for wagons.....	.....	.....	.....	.....	.....
138, 902	Lewis, C., and J. Soothill, Howard, Ill. Sewing-machine.....	.....	.....	.....	.....	.....
134, 606	Lewis, C. E., York, Pa. Thread-waxing attachment for sewing-machines.....	.....	.....	.....	.....	.....
141, 510	Lewis, D. D., deceased, G. J. Chamberlain, Dunmore and G. H. McCabe, Philadelphia, Pa., executors. Railway-frog..... (Extension.)	.....	.....	.....	.....	.....
143, 085	Lewis, E. (See Worswick & Lewis.)	.....	.....	.....	.....	.....
136, 328	Lewis, G. W., assignor to self and C. W. Walker, Portsmouth, Va. Spring for vehicles.....	.....	.....	.....	.....	.....
136, 328	Lewis, H., et al. (See Stewart, G. W., assignor.)					
136, 328	Lewis, H., Bennington, Vt. Hose-coupling.....					

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141, 445	Lewis, I. B., assignor to self and C. Van Wyck, Albion, Mich. Car-coupling.....	Aug. 5, 1873	32	10	4	137
145, 218	Lewis, J. D., Toronto, Canada. Crib for children.....	Dec. 2, 1873	161	56	4	598
	Lewis, J. H., et al. (See Sloan, D. S., assignor.)					
	Lewis, J. K. (See Lewis, W. H., assignor.)					
	Lewis, L. S., et al. (See Sloan, D. S., assignor.)					
141, 800	Lewis, L. V., Sun Prairie, Wis. Mechanical movement,	Aug. 12, 1873	360	118	4	172
140, 511	Lewis, M. E., Mansfield, O. Fruit-packer.....	July 1, 1873	145	49	4	20
	Lewis, N. W. (See Knight & Lewis.)					
136, 841	Lewis, R., Charleston, S. C. Cotton-press.....	Mar. 18, 1873	448	148	3	300
137, 140	Lewis, R. B., Quincy, Ill. Culinary boilers	Mar. 25, 1873	716	238	3	332
140, 424	Lewis, S. C., Brooklyn, N. Y. Die for making watch-case caps and backs.....	July 1, 1873	68	24	4	14
138, 032	Lewis, T. J., Chicago, Ill. Cigar-holder	Apr. 22, 1873	702	222	3	448
138, 414	Lewis, W., Brooklyn, N. Y. Photographic-plate holder	Apr. 29, 1873	1,062	334	3	485
143, 019	Lewis, W., Oxford, N. C. Cultivator	Sept. 23, 1873	621	211	4	325
136, 925	Lewis, W. A., Springfield, Vt. Churn-power	Mar. 18, 1873	518	171	3	305
139, 167	Lewis, W. H., assignor of part interest to H. E. Thayer, Philadelphia, Pa. Artificial stone.	May 20, 1873	645	.....	3	573
139, 168	Lewis, W. H., assignor to J. K. Lewis, New York, N. Y. Refrigerator	May 20, 1873	645	201	3	573
141, 227	Lewis, W. J., Pittsburgh, Pa. Manufacture of bolster plates.....	July 29, 1873	832	272	4	111
	Lewis, W. L. (See Bogart, Cramer & Lewis.)					
	Lewis, W. M. (See De Forest, D. W., assignor.)					
	Lewis, W. W., Cincinnati, Ohio. Machine for rolling horseshoe-iron..... (Extension)	Feb. 1, 1873	.....	.....	3	156
22, 812	Same..... Horseshoe-machine..... (Disclaimer filed)	Feb. 13, 1873	.....	.....	3	156
140, 285	Lewitt, W. H., assignor of one-half interest to T. M. Cochrane, Saint Louis, Mo. Ruffler for sewing-machines	June 24, 1873	782	248	3	704
	Leyburn, W. C. (See Crowley, J., assignor.)					
137, 222	Leyer, G., and J. A. Winter, Pomeroy, Ohio. Apparatus for producing bromine from bitterns, &c	Mar. 25, 1873	793	262	3	338
7, 023	Libbey, W. L., assignor to New England Glass Company, Boston, Mass. Lamp-shade. (Design).....	Dec. 9, 1873	.....	.....	4	614
	Libby, A. S. (See Blake & Libby.)					
	Same..... same..... (Reissue.)					
135, 824	Libby, A. S., Lawrence, Mass. Nail-carrier for sole-nailing machines	Feb. 11, 1873	408	132	3	171
138, 666	Same..... Sole-nailing machine.....	May 6, 1873	177	56	3	512
143, 699	Same..... Driver for boot and shoe nailing machines.....	Oct. 14, 1873	279	92	4	411
138, 262	Libby, C. A., La Cygne, Kans. Furniture-polish	Apr. 29, 1873	929	.....	3	474
143, 358	Liddell, W., assignor of three-fourths interest to R. D. Hamlin, Buffalo, N. Y. Paper-bag machine	Sept. 30, 1873	913	310	4	365
135, 480	Lidren, C., assignor to self and R. Jackson, Lafayette, Ind. Harvester	Feb. 4, 1873	81	25	3	134
	Lieb, J. W. (See Sonnekalb & Lieb)					
144, 340	Lieb, J. W., Newark, N. J. Manufacture of traveling-bags.....	Nov. 4, 1873	139	46	4	490
	Liebenstein, A., et al. (See Hoffman, A. D., assignor.)					
5, 352	Liebrich, C., deceased, by S. Croft and J. C. Schuellermann, executors, and assignors to L. Hillebrand and D. Wolf, Philadelphia, Pa. Hasp for trunk-locks	Apr. 15, 1873	652	205	3	435
	Liedbeck, A. (See Norrbin & Ohlsson, assignors.)					
5, 652	Lightfoot, B. H., Philadelphia, Pa. Treating tanned leather..... (Reissue)	Nov. 11, 1873	366	.....	4	519
	Lighthall, J. A. (See Beckman, J. V., assignor.)					
138, 667	Likar, F. C., Baltimore, Md. Safety-hook for pocket-books	May 6, 1873	178	57	3	512
143, 086	Likes, M., assignor to self and J. H. Barr, Mansfield, Ohio. Wagon-seat	Sept. 23, 1873	676	233	4	329
	Lillard, D. (See Nance & Lillard.)					
6, 484	Lilley, C. S., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet. (Design).....	Mar. 4, 1873	.....	.....	3	245
6, 485	Same..... same..... (Design).....	Mar. 4, 1873	.....	.....	3	245
138, 415	Lilley, H. H. V., Milford, Mass. Lamp-filler	Apr. 29, 1873	1,063	334	3	485
	Lilley, J. W. (See Buell & Lilley.)					
	Lilliendahl, E. M., et al. (See Clark & Lilliendahl, assignors.)					
	Lilliendahl, W. A. (See Clark & Lilliendahl.)					
145, 219	Linck, M., Danville, Ill. Vehicle-wheel	Dec. 2, 1873	162	56	4	598
139, 679	Lincoln, G. T., Leominster, Mass. Milking-pail	June 10, 1873	220	71	3	643
142, 247	Same..... Milking-stool	Aug. 26, 1873	776	255	4	225
	Lincoln, J. B. (See Clough & Lincoln.)					
137, 141	Lincoln, J. B., assignor to self and J. M. Sayles, Providence, R. I. Sewing-machine caster.	Mar. 25, 1873	717	238	3	332
140, 584	Lincoln, J. B., and C. F. Clough, Providence, R. I. Sewing-machine	July 8, 1873	221	74	4	38
	Lincoln, J. D., et al. (See Pope, F. L., assignor)					
	Lincoln, W. S. (See Rayer & Lincoln.)					
137, 007	Lincoln, W. S., and W. A. Rayer, Boston, Mass. Sewing-machine	Mar. 18, 1873	587	195	3	311
135, 825	Lindeloof, A., Brooklyn, N. Y. Road-roller	Feb. 11, 1873	408	132	3	171
135, 567	Lindemann, O., New York, N. Y. Bird-cage	Feb. 4, 1873	160	52	3	140
145, 579	Linden, N., Chicago, Ill. Stove-pipe thimble	Dec. 16, 1873	493	162	4	649
140, 146	Linderoos, G., Point Arena, Cal. Adding-machine	June 24, 1873	665	209	3	694
137, 555	Lindley, N. H., Bridgeport, Conn. Well-curb	Apr. 8, 1873	258	79	3	389
145, 113	Lindner, G. H., Brooklyn, N. Y. Sleeping-car.....	Dec. 2, 1873	66	21	4	590
	Lindsay, C. R. (See Proctor, J. K., assignor.)					
	Same..... same..... (Reissue.)					
141, 149	Lindsay, G., Belfast, Ireland. Device for increasing the friction of helical gearing	July 22, 1873	743	245	4	97
141, 446	Lindsay, J., New York, N. Y. Carpet-stretcher.....	Aug. 5, 1873	32	10	4	137
	Lindsay, J. P. (See Leonard, G. F., assignor.)					
137, 851	Lindsey, C. D., Cincinnati, Ohio. Paper-file.....	Apr. 15, 1873	528	165	3	421
136, 250	Lindsey, L. T., Jackson, Tenn. Transmitter for printing-telegraph.....	Feb. 25, 1873	793	257	3	227
136, 251	Same..... Telegraph-repeater	Feb. 25, 1873	795	258	3	227
136, 329	Same..... Electro-magnetic motor for printing-telegraphs, &c	Feb. 25, 1873	863	278	3	233
143, 700	Same..... Circuit for printing-telegraphs	Oct. 14, 1873	280	93	4	411
143, 701	Same..... Regulator for printing-telegraphs	Oct. 14, 1873	282	93	4	411
143, 702	Same..... Printing-telegraph.....	Oct. 14, 1873	283	93, 94	4	411
139, 169	Lindsley, A. E., Paw Paw, Mich. Post-hole digger.....	May 20, 1873	646	202	3	573
143, 987	Lindsley, L., and J. Mackintosh, Pawtucket, R. I. Lining for horse-collars, &c	Oct. 28, 1873	570	190	4	453
141, 801	Lindsley, W. D., assignor to self, E. V. Snively, Wathena, Kans., and L. E. Hedges, Frederick, Md. Lamp-extinguisher.....	Aug. 12, 1873	360	118	4	172
	Same..... Railway rail-joints.....	Aug. 19, 1873	569	188	4	198
142, 030	Line, C. O., Indianapolis, Ind. Supplementary oven for cooking-stoves.....	Sept. 2, 1873	144	47	4	253
142, 843	Lingenfelter, H. J., Glen, N. Y. Portable furnace.....	Dec. 30, 1873	851	277	4	701
145, 954	Linn, W. G., Bloomfield, Iowa. Telegraph cut-out	Dec. 2, 1873	23	8	4	587
145, 064	Linscott, J. M., Buxton, Me. Loom set-off mechanism.....	Aug. 12, 1873	283	93	4	166
141, 790	Linson, E., Shoemakertown, Pa. Reversible curb-bricks.....	Jan. 21, 1873	468	150	3	73
134, 994	Linthicum, J. F., assignor of one-fourth interest to I. Gilchrist, Vallejo, Cal. Railway-switch	June 3, 1873	126	42	3	619
139, 589	Linvile, J. H., Philadelphia, Pa. Truss-frame for bridge.....	Dec. 2, 1873	67	22	4	591
145, 114	Lippincott, C. & Co. (See Patterson, J., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page
6, 541	Lippincott, C., and J. Patterson, Philadelphia, Pa. Soda-water apparatus (Design)	Apr. 1, 1873	.....	.....	3	356
6, 542	Same..... same..... (Design)	Apr. 1, 1873	.....	.....	3	356
6, 543	Same..... same..... (Design)	Apr. 1, 1873	.....	.....	3	356
6, 544	Same..... Tumbler-holder..... (Design)	Apr. 1, 1873	.....	.....	3	356
140, 512	Same..... Fire-extinguisher.....	July 1, 1873	145	50	4	20
136, 740	Lippincott, S. T., Elizabeth, N. J. Window-screen.....	Mar. 11, 1873	352	116	3	283
	Lippitt, H., trustee. (See Vanstone, S., assignor.)					
143, 359	Lippmann, P., New York, N. Y. Corset-clasp.....	Sept. 30, 1873	916	311	4	365
144, 911	Same..... Skeleton-skirt.....	Nov. 25, 1873	646	220	4	565
144, 683	Lippoldt, E., Brighton, Ill. Harvester-rake.....	Nov. 18, 1873	447	151	4	537
137, 695	Lippy, D., and J. S. Blymer, Mansfield, Ohio. Thrashing-machine.....	Apr. 8, 1873	380	{ 117 118 }	3	399
135, 923	Liston, R., Albany, N. Y. Safety-hatch for railway-cars.....	Feb. 18, 1873	501	163	3	193
140, 513	Litchfield, L., and J. S. Corbin, Gouverneur, N. Y. Horse hay-rake.....	July 1, 1873	145	50	4	20
6, 359	Little, A., New York, N. Y. Printing-type..... (Design)	Jan. 21, 1873	.....	.....	3	71
6, 735	Same..... same..... (Design)	July 1, 1873	.....	.....	4	7
6, 761	Same..... same..... (Design)	July 8, 1873	.....	.....	4	37
	Little, C. L. (See Merriam & Little)..... (Design)					
	Little, E. (See Baily, A. S., assignor.)					
	Little, E. C. (See Nation & Little.)					
142, 707	Little, E. C., and D. H. Nation, Saint Louis, Mo. Heating-stove.....	Sept. 9, 1873	343	115	4	281
5, 267	Little, G., Rutherford Park, N. J. Printing-telegraph..... (Reissue)	Feb. 4, 1873	216	67	3	144
137, 456	Same..... Burglar-proof door, safe, &c.....	Apr. 1, 1873	159	50	3	370
142, 484	Same..... Transmitter and receiver for automatic telegraphs.....	Sept. 2, 1873	145	47, 48	4	253
142, 485	Same..... Perforator for automatic telegraphs.....	Sept. 2, 1873	147	48	4	254
142, 486	Same..... Telegraph-apparatus.....	Sept. 2, 1873	148	49	4	254
	Little, G. A., et al. (See Hoyt, F. A., assignor.)					
137, 852	Little, J., Newburgh, N. Y. Machine for grinding horseshoe-calks.....	Apr. 15, 1873	529	165	3	424
140, 147	Little, J. A., Cartersburgh, Ind. Wire fence.....	June 24, 1873	667	269	3	694
	Little, J. R. (See Hudner & Little.)					
136, 441	Little, J. R., assignor of one-half interest to C. A. Dunn, Monmouth, Ill. Steam vacuum-pump.....	Mar. 4, 1873	75	26	3	251
140, 052	Little, S. H., Rosemond, Ill. Street-railway car.....	June 17, 1873	563	177	3	678
143, 360	Little, S. H., assignor of one-half interest to W. D. Little, Rosemond, Ill. Fare-box.....	Sept. 30, 1873	917	311	4	365
	Little, W. D. (See Little, S. H., assignor.)					
137, 008	Littlefield, C. B., Manchester, N. H. Pill-making machine.....	Mar. 18, 1873	589	196	3	311
138, 093	Littlefield, D. G., Albany, N. Y. Cooking-stove.....	Apr. 22, 1873	755	239	3	452
139, 720	Same..... Reservoir cooking-stove.....	June 10, 1873	264	83	3	646
	Littlejohn, H., deceased, by W. Gurley, Troy, and E. Waters, Lansingburgh, N. Y., executors. Machine for crozing and chamfering barrels..... (Extension)	Mar. 1, 1873	.....	.....	3	218
138, 568	Littlejohn, L., New York, N. Y. Bung-bush inserter.....	May 6, 1873	92	29	3	505
141, 511	Same..... Tool for seating bung-busher.....	Aug. 5, 1873	90	28	4	142
145, 807	Same..... Bung-bush inserter.....	Dec. 23, 1873	699	229	4	678
138, 168	Litty, M., Williamsville, Neb. Reciprocating churn.....	Apr. 22, 1873	815	259	3	457
143, 361	Livermore, J. C., Boston, Mass. Skirt-protector.....	Sept. 30, 1873	918	311	4	365
	Livingston, G. P. (See Zeh, Livingston & Cullings.)					
137, 009	Livingstone, W., Brooklyn, assignor to J. H. Whitney, New York, N. Y. Manufacture of bolts and rivets.....	Mar. 18, 1873	589	196	3	311
135, 650	Lloyd, E., Pittsburgh, Pa. Puddling furnace.....	Feb. 11, 1873	250	79	3	159
	Lloyd, F. (See Tucker, W. B., assignor.)					
143, 828	Lloyd, R., Cleveland, Ohio. Car-coupling.....	Oct. 21, 1873	413	138	4	432
139, 798	Lobdell, G. G., assignor to self and W. Stuart, Wilmington, Del. Casting chilled rolls.....	June 10, 1873	336	104	3	651
144, 778	Lobdell, G. G., Wilmington, Del. Steam-boiler.....	Nov. 18, 1873	525	179	4	544
	Lock, J., et al. (See Cooper, S. L., assignor.)					
5, 543	Locke, H. H., Pleasantville, Pa., assignor to D. Bly, Rochester, N. Y. Pump-rod attachment..... (Reissue)	Aug. 19, 1873	621	205	4	202
138, 903	Locke, J., Lewisburgh, Pa. Cheese-cutter.....	May 13, 1873	395	124	3	540
6, 997	Locke, J. R., Amesbury, Mass. Carriage-wheel hub..... (Design)	Nov. 18, 1873	.....	.....	4	531
	Locke, L. M. (See Letton, R. E., assignor.)					
135, 826	Locke, S. D., Hoosick Falls, N. Y. Grain-binder.....	Feb. 11, 1873	409	132	3	171
139, 008	Same..... same.....	May 20, 1873	495	156	3	561
142, 798	Locke, S. D., assignor to W. A. Wood, Hoosick Falls, N. Y. Harvester rake.....	Sept. 16, 1873	431	146	4	299
	Locke Slate Company. (See Shenton, F., assignor.)					
	Locken, J., et al. (See Wilson, A., assignor.)					
135, 651	Lockwood, C. E., Bridgeport, Conn. Lunch-box.....	Feb. 11, 1873	251	79	3	159
136, 252	Lockwood, E. W., Middletown, Del. Box for assorting peaches.....	Feb. 25, 1873	796	258	3	227
143, 829	Lockwood, F. A., Winthrop, Mass. Machine for scouring, glassing, or setting leather.....	Oct. 21, 1873	414	{ 138 139 }	4	432
	Lockwood, G. E. (See Lockwood, J. F. & G. E.)					
139, 510	Lockwood, G. W., and A. Carter, assignors to C. C. Carpenter & Co., New York, N. Y. Hoop-skirt.....	June 3, 1873	58	19	3	613
142, 248	Lockwood, H. C., Baltimore, Md. Coffee-package.....	Aug. 26, 1873	777	256	4	225
145, 880	Same..... Coffee-roaster.....	Dec. 23, 1873	763	249	4	683
138, 416	Lockwood, H. D., Charlestown, Mass. Atomizer-bulb.....	Apr. 29, 1873	1,064	335	3	485
138, 417	Same..... Fountain-syringe.....	Apr. 29, 1873	1,064	335	3	485
142, 545	Lockwood, J. F. & G. E., Taylorville, Ill. Carbureter.....	Sept. 2, 1873	200	65	4	258
	Lockwood, R. B., et al. (See Woodhouse, J. V., assignor.)					
137, 556	Lockwood, R. M., assignor to W. H. Sawyer, New York, N. Y., and F. L. Pope, Elizabeth, N. J. Galvanic battery.....	Apr. 8, 1873	259	80	3	389
141, 365	Lockwood, T. B., Smyrna, Del. Hoe.....	July 29, 1873	965	314	4	122
	Lockwood, W. E., Philadelphia, Pa. Lady's collar and cuff..... (Extension of No. 1,981)	Apr. 26, 1873	.....	.....	3	444
	Same..... same..... (Extension of No. 1,982)	Apr. 26, 1873	.....	.....	3	444
	Same..... same..... (Extension of No. 5,259)	Apr. 26, 1873	.....	.....	3	444
5, 259	Same..... same..... (Reissue)	Jan. 28, 1873	845	272	3	115
140, 053	Loeb, P., assignor of one-half interest to Dayton Malleable-Iron Company, Dayton, Ohio. Plow.....	June 17, 1873	563	178	3	678
137, 223	Loeffelholz, A., and A. Prier, Milwaukee, Wis. Lanterns.....	Mar. 25, 1873	794	262	3	338
145, 955	Loesch, F., assignor of one-half interest to G. Fisher, Buffalo, N. Y. Cooler for preserving beer and wine.....	Dec. 30, 1873	852	277	4	701
145, 354	Loetscher, C., Dubuque, Iowa. Mitering-machine.....	Dec. 9, 1873	286	95	4	621
	Lofink, F. (See Reiner, H. F., assignor.)					
145, 220	Logan, C. H. & F., Pawling Post-Office, Pa. Marker, seed-planter, and cultivator.....	Dec. 2, 1873	163	56	4	598
	Logan, F. (See Logan, C. H. & F.)					
142, 924	Logan, J., Jersey City, and J. E. Hart, Newark, N. J. Cartridge.....	Sept. 16, 1873	533	182	4	308
142, 708	Logan, J. B., Baltimore, Md. Lock for sewing-machine tables, &c.....	Sept. 9, 1873	344	115	4	282

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141, 150	Logen, A. W. A., Rochdale, England. Molding pipes	July 22, 1873	743	245	4	97
145, 956	Loggins, J. G., and P. P. Wilkins, Williston, Vt. Hoop-lock cutter	Dec. 30, 1873	853	277	4	701
141, 447	Logue, F. M., Satartia, Miss. Bale-band stretcher	Aug. 5, 1873	33	11	4	138
137, 010	Lohnes, C., Springfield, Ohio. Rock-drilling machine	Mar. 18, 1873	591	196	3	311
137, 937	Lomas, J., Kellyville, Pa. Shedding mechanism for looms	Apr. 15, 1873	597	188	3	430
6, 603	Lomas, J. R., assignor to B. Shoninger, New Haven, Conn. Reed-organ case. (Design) ..	Apr. 22, 1873	.....	.....	3	444
140, 054	Same..... Pedestal for stool and tables	June 17, 1873	564	178	3	678
141, 282	Same..... Reed-organ swell	July 29, 1873	882	289	4	116
137, 011	Lomax, A. P., Warsaw, Ill. Excavator	Mar. 18, 1873	592	196	3	311
143, 629	Lomax, G. H., Somerville, Mass. Mold for glass ware	Oct. 14, 1873	213	72	4	406
144, 116	Lombard, E., assignor to self and A. H. Colby, Plymouth, Mich. Reciprocating winnower ..	Oct. 28, 1873	681	225	4	464
144, 398	Lombard, H., J. P. Morrill, and L. A. Sweatt, San Francisco, Cal. Machine for cutting cobble-stones	Nov. 11, 1873	199	67	4	506
	Lombard, N. C., trustee. (See Lambart, R. C., assignor.)					
	Lomont, F. T. (See Bayliss, Brown & Lomont.)					
	Lomont, F. T., et al. (See Hodges, P. F., assignor.)					
	Lones, J., et al. (See Lones, Vernon & Holden.)					
145, 510	Lones, J. C. and J. C. Vernon, and E. Holden, Smethwick, England. Manufacture of } carriage-axles	Dec. 16, 1873	433	{ 141 } { 142 }	4	644
	Long & Allstater. (See Alstater, R., assignor.)					
	Long & Allstater. (See Long, J. M., assignor.)					
	Long & Brothers. (See Long, C. R., assignor.)					
145, 511	Long, C. B., Worcester, Mass. Machine for bending chain-links	Dec. 16, 1873	436	142	4	644
137, 012	Long, C. P., and C. N. McEvers, Murrayville, Ill. Windmill	Mar. 18, 1873	593	197	3	311
137, 613	Long, C. R., assignor to Long & Brothers, Louisville, Ky. Knock-down chair	Apr. 8, 1873	307	95	3	393
135, 720	Long, G. W., Delaware Centre, Iowa. Apparatus for loading and unloading hay	Feb. 11, 1873	312	99	3	164
142, 638	Same..... Sling for loading and unloading hay, &c	Sept. 9, 1873	285	93	4	277
143, 581	Long, J., Mechanicsburgh, Pa. Fire and water proof roof	Oct. 14, 1873	172	58	4	403
136, 253	Long, J. M., assignor to Long & Allstater, Hamilton, Ohio. Power-hammer	Feb. 25, 1873	797	{ 258 } { 259 }	3	228
138, 033	Long, N., Muncie, Ind. Automatic-gate	Apr. 22, 1873	703	222	3	448
139, 320	Long, P., assignor of one-half interest to J. M. Phillips, Penn Township, Pa. Cultivator ..	May 27, 1873	791	252	3	592
145, 355	Long, S., Mayville, Ohio. Cooking-stove	Dec. 9, 1873	287	96	4	621
140, 379	Long, S. F., Cleveland, Ohio. Combined shirt-bosom support and shoulder-braces	July 1, 1873	37	12	4	11
144, 992	Long, S. W., assignor to self and T. H. Guthrie, Owensborough, Ky. Machine for tenon- ing cogs	Nov. 25, 1873	715	242	4	571
140, 286	Longcor, A. and J. B., Paw Paw, Mich. Fruit-ladder	June 24, 1873	783	248	3	704
	Longcor, J. B. (See Longcor, A. and J. B.)					
	Longden, C. E. (See Collins & Longden.)					
135, 227	Longfellow, H. N., Lawrence, Mass. Hot-air furnace	Jan. 28, 1873	690	222	3	103
145, 665	Longley, A. H., and E. R. Stickney, Springfield, Mass. Chemical compound for cleaning jewelry, diamonds, &c	Dec. 2, 1873	23	.....	4	587
	Longley, C. H., et al. (See Clark, C. H., assignor.)					
139, 901	Longwell, H., Mansfield, Pa. Boring-machine	June 17, 1873	438	136	3	667
134, 686	Lonsky, A., Hoboken, N. J. Apparatus and process for revivifying bone-black	Jan. 7, 1873	177	58	3	21
134, 687	Loofbourrow, D., Hillsborough, Iowa. Bee-hive	Jan. 7, 1873	178	58	3	21
141, 652	Look, O., Bridgeport, Conn. Wheel for vehicles	Aug. 12, 1873	228	72	4	161
145, 665	Loomer, A. F. (See Loomer, L. H. and A. F., and Smith.)					
	Loomer, L. H. and A. F., and L. M. Smith, assignors to L. L. Loomer & Sons, Birming- ham, Conn. Corset	Dec. 16, 1873	566	186	4	655
	Loomer, L. L., & Sons. (See Loomer, L. H. and A. F., and Smith, assignor.)					
6, 964	Loomis, J. W., and A. T. Goodell, New York, N. Y. Breast-pin, &c	Oct. 21, 1873	.....	.....	4	425
142, 709	Loomis, K. H., Cleveland, Ohio. Nut-lock	Sept. 9, 1873	344	116	4	282
145, 434	Loomis, M., Liberty Centre, Ohio. Gate	Dec. 9, 1873	354	118	4	626
139, 009	Looney, J. J., Saint Petersburg, Pa. Treating heavy petroleum	May 20, 1873	496	.....	3	561
139, 010	Same..... Cleaning oil-wells	May 20, 1873	497	.....	3	561
145, 741	Lord, E., Portland, Me. Sofa-bedstead	Dec. 23, 1873	644	211	4	674
134, 688	Lord, G. E., Utica, N. Y. Rocking-chair	Jan. 7, 1873	179	58	3	21
	Lord, H. C., et al. (See Stephenson, W. O., assignor.)					
	Lord, I. C., et al. (See Richardson, J. D., assignor.)					
144, 399	Lord, J. P., Manchester, N. H. Key-cap for key-board instruments	Nov. 11, 1873	199	68	4	506
137, 783	Lord, T., assignor to self, J. Kelly, and H. J. Paine, Providence, R. I. Piston-rod packing ..	Apr. 15, 1873	470	147	3	419
145, 066	Lorenz, J., and H. F. W. Bender, Hamilton, Ohio. Refrigerator	Dec. 2, 1873	24	8	4	587
134, 689	Loretz, A. J. L., Brooklyn, N. Y. Steam-pumping engine	Jan. 7, 1873	180	58, 59	3	21
139, 070	Same..... Compound steam-pump	May 20, 1873	551	173	3	565
139, 071	Same..... Compound high and low pressure steam-pump	May 20, 1873	552	174	3	565
144, 852	Loretz, A. J. L., assignor of one-third interest to N. Hubbard, Brooklyn, N. Y. Combined quarter-connection and parallel-motion for engines	Nov. 25, 1873	602	205	4	561
136, 605	Lorey, W. F., Mendon, N. Y. Brush-ferrule	Mar. 11, 1873	238	81	3	274
134, 903	Lorton, A. H., New York, N. Y. Wash-stand	Jan. 14, 1873	376	120	3	50
	Loryea, A. M. (See Palmer, C. H., assignor.)					
	Losie Manufacturing Company. (See Losie, T. M., assignor.)					
137, 457	Losie, T. M., assignor to Losie Manufacturing Company, Elmira, N. Y. Adjustable stove- pipe cover	Apr. 1, 1873	159	51	3	370
141, 937	Lossie, W., Owensborough, Ky. Fire-place	Aug. 19, 1873	490	162	4	192
134, 904	Loth, H., Philadelphia, Pa. Sewing-machine table	Jan. 14, 1873	377	120	3	50
134, 905	Same..... same	Jan. 14, 1873	378	120	3	50
135, 827	Same..... same	Feb. 11, 1873	410	132	3	171
138, 904	Same..... Folding-table, &c	May 13, 1873	395	124	3	540
140, 929	Same..... Sewing-machine stand	July 15, 1873	528	176	4	70
140, 930	Same..... Compound hinge	July 15, 1873	529	177	4	70
	Lothrop, H. A. (See Watson, J. M., assignor)					
	Lotz, W. H. (See Sontag & Lotz.)					
	Loucks, W., executor. (See Crowell & Smith)					
	Loughery, J. S. (See Marston, T. P., assignor.)					
134, 755	Loughery, J. S., New York, N. Y. Tag-fastening	Jan. 14, 1873	245	80	3	40
	Loughlin, J., et al. (See Pritchard, T., assignor.)					
135, 828	Loughridge, W., Baltimore, Md. Steam and air brake	Feb. 11, 1873	410	133	3	171
143, 703	Louineau, B., Sables D'Olonnes, France, Domino	Oct. 14, 1873	287	94	4	412
135, 350	Lounsberry, N. O., Wilmington, Del. Machines for graining, pebbling, and softening skins and leather	Jan. 28, 1873	800	258	3	112
140, 633	Same..... Machinery for pebbling and graining wet skins	July 8, 1873	264	89, 90	4	41
	Love Brothers. (See Love, S. Y., assignor.)					
135, 829	Love, J., Cusseta, Tex. Plow	Feb. 11, 1873	411	133	3	171
143, 915	Love, J. C., Philadelphia, Pa. Vapor-burner	Oct. 21, 1873	486	164	4	438

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143, 362	Love, S. Y., assignor to Love Brothers, Philadelphia, Pa. Lubricating compound.....	Sept. 30, 1873	919		4	365
139, 321	Love, W., McConnellsville, Ohio. Gaiter.....	May 27, 1873	791	252	3	592
144, 463	Love, W., Buffalo, N. Y. Slide-valve for steam-engine.....	Nov. 11, 1873	253	85	4	510
144, 684	Lovejoy, A. J., assignor of one-half interest to M. Whithead, Augusta, Me. Storm window-fastening.....	Nov. 18, 1873	448	152	4	537
139, 254	Lovejoy, L. A., Lynn, Mass. Hook for hanging flower-pots, &c.....	May 27, 1873	734	232	3	588
144, 277	Lovell, A. A., Worcester, Mass. Cement-pipe trap.....	Nov. 4, 1873	90	30	4	485
142, 249	Lovell, E., St. Louis, Mo. Sofa-bedstead.....	Aug. 26, 1873	777	256	4	225
136, 077	Lovell, G. W. C., Clarksville, Tenn. Case for heating sad-irons.....	Feb. 18, 1873	632	207	3	203
136, 526	Same..... Sad-iron.....	Mar. 4, 1873	156	50	3	258
136, 659	Lovell, M. N., assignor of one-half interest to F. F. Adams, Erie, Pa. Step-ladder.....	Mar. 11, 1873	284	95	3	277
139, 511	Lovell, M. N., Erie, Pa. Washing-machine.....	June 3, 1873	59	19	3	613
136, 842	Lovett, A. M., Zanesville, Ohio. Animal-trap.....	Mar. 18, 1873	449	149	3	300
137, 696	Lovett, G. L., Fitchburgh, Mass. Machine for washing paper-stock.....	Apr. 8, 1873	381	118	3	399
134, 906	Lovett, T. R., Philadelphia, Pa. Street-railway.....	Jan. 14, 1873	378	120	3	50
	Lovewell, S. K. (See Lamb, L. L., assignor.)					
136, 078	Low, J., Steubenville, Ohio. Thill-coupling.....	Feb. 18, 1873	633	208	3	203
135, 830	Low, J. B., Ravenna, Ohio. Screw-cutting device.....	Feb. 11, 1873	412	133	3	171
135, 481	Low, W. R., Sandwich, Ill. Binder's stand and table for harvesters.....	Feb. 4, 1873	82	26	3	134
139, 721	Lowden, G., Brooklyn, N. Y. Car-starter.....	June 10, 1873	265	83	3	646
	Lowder, S. (See Crippen, I. A., assignor.)					
142, 858	Lowe, H. C., assignor to self and J. B. Haley, Northeast, Md. Nut-lock.....	Sept. 16, 1873	480	164	4	303
	Lowe, J. (See Freeman, Lowe & Stevens.)					
138, 264	Lowe, J., assignor to the Albert Field Tack Company, Taunton, Mass. Machine for cutting out planchets of sheet metal.....	Apr. 29, 1873	930	{ 293 } { 294 }	{ 3 }	{ 474 }
	Lowe, J. A., New York. Molding water-traps..... (Extension)	Sept. 29, 1873	.....	.....	4	322
	Same..... Water-trap..... (Extension)	Dec. 20, 1873	.....	.....	4	640
	Lowe, J. T. (See Thomas, W. E., assignor.)					
143, 170	Lowe, J. W., Ashland, Ohio. Horse hay-fork.....	Sept. 23, 1873	739	254	4	335
138, 668	Lowe, P. W., assignor to self and E. W. Doolittle, Plantsville, Conn. Die for forging stay-ends.....	May 6, 1873	179	57	3	512
	Lowell Manufacturing Company. (See Campbell, R. R., assignor.)..... (Design.)					
	Same..... (See Christie, J. M., assignor)..... (Design.)					
	Same..... (See Hamer, J., assignor)..... (Design.)					
	Same..... (See Lilley, C. S., assignor)..... (Design.)					
	Same..... (See McNair, D., assignor)..... (Design.)					
138, 293	Loewenstein, W., Keokuk, Iowa. Wagon-axle lubricator.....	Apr. 29, 1873	929	293	3	474
142, 859	Lowman, H. L., Birmingham, Conn. Manufacture of shovels, &c.....	Sept. 16, 1873	480	164	4	303
145, 435	Same..... Trunk.....	Dec. 9, 1873	355	118	4	626
	Lownds, S. (See Chadwick & Lownds.)					
142, 487	Lowrie, H. C., Fort Wayne, Ind. Car-coupling.....	Sept. 2, 1873	149	49	4	254
145, 881	Lowrie, H. C., assignor of one-half interest to W. A. Roberts and D. Gibson, Fort Wayne, Ind. Draw head for railway-cars.....	Dec. 23, 1873	765	250	4	683
	Lowry, J. L., Pittsburgh, Pa. Fire-plug..... (Extension)	Feb. 22, 1873	.....	.....	3	156
	Lozier, S., et al. (See Broadbooks, P., assignor.)					
	Lubricating Car-Axle Company. (See Johnson, J. G., assignor.)					
	Lucas, B. (See Lucas, N., assignor.)					
135, 482	Lucas, H. S., Chester, Mass. Machine for grinding emery.....	Feb. 4, 1873	83	26	3	134
	Lucas, I. (See Ernst & Lucas.)					
138, 334	Lucas, J., Hastings, Minn. Rotary steam-engine.....	Apr. 29, 1873	995	313	3	479
141, 802	Lucas, J., Gibbsborough, N. J., assignor to self and W. H. Lucas, Philadelphia, Pa. Paints.....	Aug. 12, 1873	361	.....	4	172
139, 011	Lucas, J. B., Portland, Me. Razor-strap.....	May 20, 1873	497	156	3	561
145, 742	Same..... same.....	Dec. 23, 1873	645	211	4	674
143, 020	Lucas, N., Norwich, assignor of one-half interest to B. Lucas, Preston, Conn. Condenser for carding-machines.....	Sept. 23, 1873	622	211	4	325
144, 117	Lucas, T. E., Chesterfield, N. C. Hoop-lock.....	Oct. 28, 1873	681	225	4	464
	Lucas, W. H. (See Lucas, J., assignor.)					
144, 993	Luce, G., assignor to Luce, Son & Rozan, Marseilles, France. Apparatus for refining and desilvering lead.....	Nov. 25, 1873	716	242	4	571
136, 660	Luce, G. D., New Orleans, La. Magazine fire-arm.....	Mar. 11, 1873	285	95	3	277
141, 938	Luce, S., assignor to W. Wallace, Syracuse, N. Y. Harvester.....	Aug. 19, 1873	491	162	4	192
	Luce, Son & Rozan. (See Luce, G., assignor.)					
141, 060	Lucetti, A., New York, N. Y. Ice-cream freezer.....	July 22, 1873	658	222	4	90
141, 366	Lucia, J., Little Suamico, Wis. Machine for dressing the teeth of saws.....	July 29, 1873	966	314	4	122
141, 228	Luckey, M. M., Indianapolis, Ind. Trestle.....	July 29, 1873	832	272	4	111
144, 994	Lucus, W., Olive Green, Ohio. Farm-gate.....	Nov. 25, 1873	717	242	4	571
138, 335	Lucy, G., Mobile, Ala. Medical compound for treating rheumatism, &c.....	Apr. 29, 1873	996	.....	3	479
134, 812	Ludlow, W. D., New York, N. Y. Curtain-cord rack.....	Jan. 14, 1873	296	95	3	44
137, 458	Ludlow, W. I., Washington, D. C. Hinge.....	Apr. 1, 1873	160	51	3	370
	Ludwig, J. H. A., et al. (See Buckner, C., assignor.)					
141, 653	Luehmann, F., and C. Roehl, Chicago, Ill. Truck for carrying safes, &c.....	Aug. 12, 1873	228	72	4	161
142, 925	Lufbery, G. F., Montargis, France. Electrical stop for looms, &c.....	Sept. 16, 1873	534	182	4	308
	Lufkin, A. (See Rogan, D. H., assignor.)					
142, 031	Lufkin, C. M., & C. G. Allen, Barre, Mass. Horse hay-rack.....	Aug. 19, 1873	570	188	4	198
138, 569	Luks, E. C., Massillon, Ohio. Dinner-pail.....	May 6, 1873	93	29	3	505
139, 404	Lull, H., Hoboken, N. J. Curtain-cord fastener.....	May 27, 1873	869	278	3	599
145, 303	Lum, L. P., Newburgh, N. Y. Crimping-machine.....	Dec. 9, 1873	241	81	4	617
143, 771	Lumb, W. J., Zanesville, Ohio. Sealing-wax package.....	Oct. 21, 1873	365	121	4	428
141, 512	Lumbeck, J. B., Leon, Iowa. Compound for destroying insects, &c.....	Aug. 5, 1873	90	.....	4	142
139, 902	Lummus, W. W., Lynn, Mass. Composite beams.....	June 17, 1873	439	136	3	667
139, 903	Same..... Beam for floors.....	June 17, 1873	439	137	3	667
139, 904	Same..... same.....	June 17, 1873	440	137	3	667
136, 843	Lundbergh, A., Chicago, Ill. Folding-lounge.....	Mar. 18, 1873	449	149	3	300
143, 171	Lundgren, J., assignor to J. R. Cole, New York, N. Y. Steam cooking-apparatus.....	Sept. 23, 1873	739	255	4	335
137, 375	Lundquist, E., Grass Valley, Cal. Process for separating gold and silver from base metals.....	Apr. 1, 1873	86	.....	3	364
6, 545	Lunkenheimer, F., Cincinnati, Ohio, and J. Meehan, Covington, Ky. Lubricating-cup..... (Design)	Apr. 1, 1873	.....	.....	3	357
	Same..... Lubricator.....	Apr. 22, 1873	815	259	3	457
146, 083	Lunquest, J. M., Atlanta, Ga. Garden-implement.....	Dec. 30, 1873	960	310	4	710
141, 939	Luppert, V., & P. St. Pierre, Williamsport, Pa. Saw.....	Aug. 19, 1873	491	162	4	192
	Lupprian, C. (See Günther, H., assignor.)					
136, 741	Luquet, A., San Francisco, Cal. Ageing wines and liquors.....	Mar. 11, 1873	354	117	3	283
141, 151	Lusby, C. C., Philadelphia, Pa. Umbrella.....	July 22, 1873	754	246	4	97
145, 666	Lusby, C. C., assignor of one-half interest to W. J. Chambers, Philadelphia, Pa. Fan.....	Dec. 16, 1873	567	186	4	655

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 405	Lusby, C. C., and W. W. Winter, Philadelphia, Pa. Umbrella-tip retainer.....	May 27, 1873	869	278	3	599
144, 464	Luther, J., assignor of one-half interest to Richards & Fox, Buchanan, Mich. Carpet-stretcher.....	Nov. 11, 1873	253	85	4	510
5, 386	Luther, J. H., Petroleum Centre, Pa. Grab-tool for oil-wells..... (Reissue).....	Apr. 29, 1873	1, 118	353	3	489
134, 995	Same..... Well-packing.....	Jan. 21, 1873	468	150	3	73
141, 940	Luther, J. P., Berlin, Wis. Turning-lathe.....	Aug. 19, 1873	492	162	4	192
134, 907	Luttgens, H. A., Paterson, N. J. Fifth-wheel for carriages.....	Jan. 14, 1873	379	121	3	50
134, 996	Same..... Wagon-body.....	Jan. 21, 1873	469	151	3	73
	Lutz, J. A. (See Waddell, W. H. & L., and Lutz.)					
	Lyde, G. F. (See Richards, J. B., assignor.)					
142, 573	Lydiatte, J., Montreal, Canada, assignor to New England Glass Company, Boston, Mass. Method of treating glass-molds.....	Sept. 9, 1873	233	76	4	273
144, 779	Lyle, J. A., Bridgeport, Ohio. Fly-brush.....	Nov. 18, 1873	527	179	4	544
	Lyle, R., et al. (See Weagant, H. L., assignor.)					
136, 844	Lyles, H., Washington, D. C. Fire-escape ladder.....	Mar. 18, 1873	450	149	3	300
146, 082	Lyman, J. B., Rockford, Ill. Carbureter.....	Dec. 30, 1873	959	310	4	709
143, 172	Lynch, E. P., Davenport, Iowa. Cultivator.....	Sept. 23, 1873	740	255	4	335
139, 255	Lynch, M. A., Boston, Mass. Lamp-lighting apparatus.....	May 27, 1873	734	232	3	5-8
138, 336	Lynch, P. P., Newark, N. J. Hinge.....	Apr. 29, 1873	996	314	3	479
145, 743	Lynde, J. D., Philadelphia, Pa. Sectional steam-generator.....	Dec. 23, 1873	645	{ 211 } { 212 }	{ 4 }	684
	Lyon and Fellows Manufacturing Company. (See Hatch, G. W., assignor.)					
144, 212	Lyon, C. B., Buffalo, N. Y. Revolving blackboard.....	Nov. 4, 1873	38	11	4	481
	Lyon, H. A., et al. (See Palmer, G. N., assignor.)					
135, 435	Lyon, I. W., Brooklyn, N. Y. Dentist's stool.....	Feb. 4, 1873	40	12	3	130
135, 924	Lyon, I. W., New York, N. Y. Dentist's stool.....	Feb. 18, 1873	502	163	3	193
139, 905	Lyon, V. H., Indianapolis, Ind. Bottle.....	June 17, 1873	440	137	3	667
142, 926	Lyon, W., Mamaroneck, assignor to the Biddle Manufacturing Company, New York, N. Y. Combined punching and shearing machine.....	Sept. 16, 1873	535	183	4	308
138, 418	Lyons, A., and I. B. Abrahams, New York, N. Y. Pin-hinge.....	Apr. 29, 1873	1, 065	335	3	485
142, 710	Lyons, J., Chippewa, Canada. Boot and shoe stretcher.....	Sept. 9, 1873	345	116	4	282
138, 170	Lyons, M. F., New York, N. Y. Plaster wall.....	Apr. 22, 1873	817	260	3	457
144, 465	Lytch, J., Laurinburgh, N. C. Fertilizer-distributor.....	Nov. 11, 1873	254	85	4	510
	Lyte, F. M. (See Storck & Lyte.)					
138, 905	Maas, A. W. M., Chicago, Ill. Brick-kiln.....	May 13, 1873	396	125	3	540
143, 916	Maass, F., Newark, N. J. Mold for fancy buttons.....	Oct. 21, 1873	487	164	4	438
140, 514	Mabie, G., Dixon, Ill. Windmill.....	July 1, 1873	146	50	4	20
139, 512	Macdonald, C., Hoboken, and C. O. H. Fritzsche, Paterson, N. J. Turn-table.....	June 3, 1873	59	19, 20	3	613
143, 917	MacDonald, J., Boston, Mass. Machine for boring and facing cylinders.....	Oct. 21, 1873	487	164	4	438
135, 228	Macdonald, J. K., Newark, N. J. Security-hook.....	Jan. 28, 1873	691	222	3	103
144, 400	Macdonald, R., Hull, England. Mold for oil-cakes.....	Nov. 11, 1873	200	68	4	506
139, 680	Macfarlane, I. G., Wilkesburgh, Pa. Railway-car.....	June 10, 1873	221	71	3	643
145, 744	Macfarlane, I. G., Pittsburgh, Pa. Heating-stove.....	Dec. 23, 1873	646	212	4	674
137, 142	Machlet, G., Newark, N. J. Doughnut-mold.....	Mar. 25, 1873	718	238	3	332
137, 013	Mack, B. L., assignor to self and T. M. Dickinson, Essex, Conn. Earth-closet.....	Mar. 18, 1873	594	197	3	311
139, 012	Mack, C. H., New York, N. Y. Porcelain blocks for dental fillings.....	May 20, 1873	498	157	3	561
144, 912	Mack, D., Barnesville, Kans. Garden-cultivating implement.....	Nov. 25, 1873	647	220	4	565
145, 957	Mack, E. E., Albany, N. Y. Cuff.....	Dec. 30, 1873	854	278	4	701
	Mack, S. F. (See Barker & Mack.)					
139, 799	Mack, W. B., Boston, Mass. Ejector.....	June 10, 1873	337	105	3	652
140, 783	Mackay, D., Chicago, Ill. Window-sash and frame.....	July 15, 1873	392	135	4	60
136, 529	Mackay, J., Dundas, Canada. Mill for grinding barley.....	Mar. 4, 1873	157	50, 51	3	258
145, 580	Mackay, P. N., San Francisco, Cal. Flux for treating ores and metals.....	Dec. 16, 1873	494	.....	4	649
	MacKellar, Smiths & Jordan. (See Smith, R., assignor.) (Design.)					
138, 510	Mackenzie, P. W., Blaauveltville, N. Y. Cupola-furnace.....	May 6, 1873	37	12	3	
137, 459	Mackey, A., New York, N. Y. Sugar-drier.....	Apr. 1, 1873	161	51	3	370
	Mackey, G. S. (See Mackey, G. W. & G. S.)					
144, 780	Mackey, G. W. & G. S., Lathrop, Pa. Gate.....	Nov. 18, 1873	527	179	4	544
141, 654	Mackie, S. J., Westminster, England. Manufacture of gun-cotton.....	Aug. 12, 1873	230	.....	4	162
	Mackintosh, J. (See Lindsley & Mackintosh.)					
144, 689	MacLean, J. P., Brooklyn, N. Y. Corset-clasp.....	Nov. 18, 1873	452	153	4	538
	Maclure, J. (See Tompkins & Maclure) (Extension.)					
	Maclure, J., Newark, N. J. Machine for covering saddle-trees..... (Extension.)	Oct. 18, 1873	.....	.....	4	401
145, 808	Macomber, T. S., Hamilton, N. Y. Pie-marker.....	Dec. 23, 1873	760	229	4	678
145, 882	Macomber, W. C., Mystic River, Conn. Loom-shuttle-relief mechanism.....	Dec. 23, 1873	766	250	4	683
135, 994	Macowitzky, C. P., Corpus Christi, Tex. Vibrating propeller.....	Feb. 18, 1873	559	185	3	197
146, 009	Same..... Propulsion of vessels.....	Dec. 30, 1873	898	291	4	704
134, 908	MacVicar, P., Philadelphia, Pa. Apparatus for filing and binding papers.....	Jan. 14, 1873	380	121	3	50
	Macy, J. W. (See Pierson, Macy & Moore.)					
5, 415	Madden, J. W., and J. Dodsworth, Buffalo, N. Y., said Dodsworth assignor by mesne assignment to J. Hewitt. Fluting-machine..... (Reissue).....	May 20, 1873	669	219	3	577
	Madell, J. B. (See Carpenter, C., jr.)					
140, 287	Maertens, E., Philadelphia, Pa. Electrical stop-motion for machinery.....	June 24, 1873	783	248	3	704
6, 897	Maeyers, W., New York, N. Y. Lamp-shade..... (Design.)	Sept. 30, 1873	.....	.....	4	354
	Magee Furnace Company. (See Magee, J., assignor.)					
	Same..... same..... (Design.)					
6, 979	Magee, J., Chelsea, Mass., assignor to the Magee Furnace Company. Heating-stove. (Design).....	Nov. 4, 1873	.....	.....	4	478
145, 512	Same..... Hot-air furnace.....	Dec. 16, 1873	437	{ 142 } { 143 }	{ 4 }	644
145, 513	Same..... same.....	Dec. 16, 1873	433	143	4	644
136, 845	Magee, P., New Orleans, La., Railway-track tamper.....	Mar. 18, 1873	452	150	3	300
138, 337	Mageean, M., and G. W. Marks, Chicago, Ill. Elevator.....	Apr. 29, 1873	997	314	3	480
	Magic Ruffle Company. (See Arnold, G. B., assignor.) (Disclaimer.)					
137, 853	Magie, J. K., Canton, Ill. Station-indicator.....	Apr. 15, 1873	530	165	3	424
135, 278	Magill, W., Port Deposit, Md. Base-burning fire-place heater.....	Jan. 28, 1873	736	227	3	107
134, 813	Magoun, T. P. I., Worcester, Mass. Fastener for meeting-rails of sashes.....	Jan. 14, 1873	297	96	3	44
136, 167	Same..... Folding table, &c.....	Feb. 25, 1873	728	235	3	222
136, 079	Magowan, A., Trenton, N. J. India-rubber spring.....	Feb. 18, 1873	633	208	3	203
137, 376	Maguire, C. W., Brooklyn, N. Y. Blacking-brush.....	Apr. 1, 1873	87	28	3	364
135, 040	Mahan, S., Cleveland, Ohio. Lap-board.....	Jan. 21, 1873	511	165	3	76
143, 918	Mahan, S. W., assignor to self and C. E. Cardell, Middlebury, Vt. Article of food from cider.....	Oct. 21, 1873	488		4	433

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Mahurin, J. L. (<i>See</i> Thompson & Mahurin.)					
	Maidhof, M., executrix. (<i>See</i> Boch, W.) (Extension.)					
146, 084	Main, R. P., Canton, N. Y. Milk-cooler	Dec. 30, 1873	961	310	4	710
5, 363	Maine, S. C., Boston, Mass., assignor by mesne assignment to Maine's Portable Ventilator Company. Ventilator	Apr. 22, 1873	869	275	3	461
142, 799	Maine, S. C., Boston, Mass. Car-ventilator	Sept. 16, 1873	432	146	4	299
	Maine's Portable Ventilator Company. (<i>See</i> Maine, S. C., assignor) (Reissue.)					
145, 221	Maitre, E., Vauxaules, France. Wooden panel	Dec. 2, 1873	164	56	4	598
142, 250	Majer, C., Brooklyn, N. Y. Machine for forming the backs of saws	Aug. 26, 1873	778	256	4	225
	Major, W. T., <i>et al.</i> (<i>See</i> Grotz, C., assignor.)					
142, 574	Malick, W., Erie, Pa. Machine for making staples	Sept. 9, 1873	234	76	4	273
144, 401	Same..... Machine for pointing staples	Nov. 11, 1873	201	68	4	506
145, 514	Same..... Till-alarm	Dec. 16, 1873	439	143	4	644
6, 429	Malkin, L. G., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	Feb. 18, 1873			3	189
6, 430	Same..... same..... (Design)	Feb. 18, 1873			3	189
6, 524	Same..... same..... (Design)	Mar. 25, 1873			3	325
6, 525	Same..... same..... (Design)	Mar. 25, 1873			3	325
6, 604	Same..... same..... (Design)	Apr. 22, 1873			3	444
6, 605	Same..... same..... (Design)	Apr. 22, 1873			3	444
6, 934	Same..... same..... (Design)	Oct. 7, 1873			4	380
138, 419	Mallett, F. W., New Haven, Conn. Machine for making needles	Apr. 29, 1873	1, 065	{ 335 336 337 }	3	485
	Mallon, J. (<i>See</i> Von Phul & Mallon.)					
5, 512	Mallory, G. W., Mystic Bridge, Conn. Boat-lowering apparatus (Reissue) ..	July 29, 1873	1, 021	331	4	126
	Mallory, Wheeler & Co. (<i>See</i> Andrews, W. H., assignor.)					
	Same..... same..... (Design)					
136, 742	Malmström, P. E., and P. E. Dummer, New York, N. Y. Safety pocket-hook	Mar. 11, 1873	354	117	3	283
138, 338	Malone, M. C., Palmyra, Ill. Pruning-shears	Apr. 29, 1873	998	314	3	480
	Maloney, J., <i>et al.</i> (<i>See</i> Welch, E. P., assignor.)					
	Same..... same..... (Reissue.)					
	Maloy, J. C. (<i>See</i> Miller, G. C., assignor.)					
143, 517	Maloy, J. C., Johnstown, Pa. Railway-ticket holder	Oct. 7, 1873	99	35	4	389
145, 067	Same..... Car-coupling	Dec. 2, 1873	25	8	4	587
135, 229	Maloy, J. W., Boston, assignor to B. F. Larabee and S. H. Hodges, Lynn, Mass. Machine for burnishing and trimming the edges of boot and shoe soles ..	Jan. 28, 1873	692	222	3	103
136, 080	Same..... Machine for trimming, &c., the edges of boot and shoe soles	Feb. 18, 1873	634	208	3	203
141, 655	Maltbie, P. L., Ramapo, New York, N. Y. Thill-coupling	Aug. 12, 1873	231	72	4	162
	Maltby, D. F., <i>et al.</i> (<i>See</i> Capewell, G. J., assignor.)					
143, 630	Maltby, P., Cleveland, Ohio. Registering steam-gage	Oct. 14, 1873	214	72	4	406
	Manahan, J. G., <i>et al.</i> (<i>See</i> Wynn, U., assignor.)					
135, 279	Mancha, J. F., Ridgely, Md. Bedstead-fastening	Jan. 28, 1873	737	237	3	107
	Manchester, F. O. (<i>See</i> Jenkins, N., assignor.)					
136, 528	Mangham, J. T., Gatesville, Tex. Apparatus for stretching wire fences	Mar. 14, 1873	159	51	3	258
139, 072	Mangold, S., New York, N. Y. Milk-boiler alarm	May 20, 1873	554	174	3	566
141, 283	Manico, E., London, England, assignor to E. Vergnes, New Orleans, La. Submarine foundation	July 29, 1873	883	289	4	116
	Manigle, E. M., Philadelphia, Pa. Scales	Sept. 6, 1873			4	240
138, 265	Manker, W. J., Sedalia, Mo. Car-axle box	Apr. 29, 1873	932	294	3	474
146, 010	Manley, W. R., New York, N. Y. Rotary engine	Dec. 30, 1873	889	{ 291 292 }	4	704
	Manly, M. M. (<i>See</i> Sellers & Manly.)					
134, 553	Manly, M. M., and S. Sellers, Philadelphia, Pa. Rolled-iron moldings	Jan. 7, 1873	48	15	3	11
139, 590	Mann, A. S., Pittsburgh, Pa. Sad, fluting, and band iron	June 3, 1873	127	42	3	619
141, 880	Same..... Smoothing-iron	Aug. 19, 1873	445	145	4	188
144, 118	Same..... Hand-washing rubber	Oct. 28, 1873	682	226	4	464
140, 716	Mann, A. S., Saint Louis, Mo. Plow	July 8, 1873	332	113	4	47
	Mann, D. (<i>See</i> Cubberley & Mann.)					
135, 230	Mann, E. D., Elyria, O. Railway-chair	Jan. 28, 1873	694	223	3	103
	Mann, H. (<i>See</i> Mann, J. F. & H.)					
6, 800	Mann, J. F. & H., Brooklyn, N. Y. Clock-case	Aug. 12, 1873			4	159
135, 925	Mann, R. J., Burlington, Iowa. Construction of metallic sieves	Feb. 18, 1873	503	164	3	193
135, 926	Same..... same..... (Design)	Feb. 18, 1873	503	164	3	193
143, 704	Manneck, H., New York, N. Y. Hinge	Oct. 14, 1873	288	94	4	412
5, 470	Manner, G. C., New York, N. Y. Upright piano	July 1, 1873	198	66	4	24
137, 377	Manner, G. C., Mott Haven, N. Y. Upright-piano action	Apr. 1, 1873	87	28	3	364
141, 152	Manner, G. C., New York, N. Y. Piano	July 22, 1873	745	246	4	97
	Manning, Bowman & Co. (<i>See</i> Manning, E. B., assignor.)					
135, 231	Manning, C. H., Washington, D. C. Tau-vat	Jan. 28, 1873	694	223	3	103
135, 232	Same..... same..... (Design)	Jan. 28, 1873	696	223	3	104
138, 906	Same..... same..... (Design)	May 13, 1873	397	125	3	540
145, 883	Manning, D. R., Brooklyn, assignor to J. J. & W. M. Walton, New York, N. Y. Combined paper-weight and sponge-holder	Dec. 23, 1873	767	250	4	683
6, 898	Manning, E. B., Middletown, Conn. Tea and coffee pot base	Sept. 30, 1873			4	354
140, 515	Manning, E. B., assignor to Manning, Bowman & Co., West Meriden, Conn. Molasses-pitcher	July 1, 1873	148	51	4	20
	Manning, F. (<i>See</i> Morgan, C., assignor.)					
139, 591	Manning, G. S., Danville, Ill. Lady's work-stand	June 3, 1873	128	42	3	619
145, 515	Manning, I., assignor to M. S. Frink, Philadelphia, Pa. Sewing-machine	Dec. 16, 1873	440	144	4	644
134, 690	Manning, J., Rockport, assignor to C. J. Norwood, Ipswich, and J. J. & W. N. Manning, Rockport, Mass. Manufacture of isinglass	Jan. 7, 1873	181	59	3	21
	Manning, J. J., <i>et al.</i> (<i>See</i> Manning, J., assignor.)					
139, 170	Manning, R. S., Trenton, N. J. Sealing fruit-jars	May 20, 1873	647	202	3	573
	Manning, W. D., <i>et al.</i> (<i>See</i> Manning, J., assignor.)					
144, 781	Manning, W. N., Rockport, Mass. Reed-organ action	Nov. 18, 1873	528	179	4	544
135, 041	Manny, J. P., Rockford, Ill. Harvester	Jan. 21, 1873	512	{ 165 166 }	3	76
139, 471	Same..... Cultivator	June 3, 1873	24	7, 8	3	611
142, 032	Mansfield, E., Orno, Me. Cant-hook	Aug. 19, 1873	573	189	4	199
135, 483	Mansfield, J., Jefferson, Wis. Cooking utensil	Feb. 4, 1873	84	26	3	134
137, 224	Mansfield, P. R., Lancaster, Mass. Feed and delivery apron	Mar. 25, 1873	795	262	3	338
	Mansfield, W. (<i>See</i> Sanborn & Mansfield) (Extension.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 743	Manson, G. W., assignor of one-half interest to A. A. Miller, Auburn, Me. Pegging-machine.	Mar. 11, 1873	355	117	3	283
141, 367	Manson, G. W., Auburn, Me. Sewing-machine motor.	July 29, 1873	966	314	4	122
140, 148	Mansure, R., jr., assignor of one-half interest to G. Bates, Philadelphia, Pa. Vessel for paints, oils, varnish, &c.	June 24, 1873	667	209	3	694
	Manton, J. P. (See Remington, Thayer & Manton.)					
135, 484	Manuel, E., assignor to self and G. Gny, Milwaukee, Wis. Tube-cutter.	Feb. 4, 1873	84	26	3	134
137, 697	Manuel, G. W., Napa, Cal. Gang-plow.	Apr. 8, 1873	382	118	3	399
145, 516	Manwaring, H., Danville, Ky. Thill-coupling.	Dec. 16, 1873	441	144	4	645
	Mapes, A. J. (See Hughes & Mapes.)					
	Mapes, E. (See Martin & Mapes.)					
135, 233	Mapother, D. H., Louisville, Ky. Safety gun-locks.	Jan. 28, 1873	697	223	3	104
	Mappin, W. S. (See Skoines, H., assignor.)					
137, 938	Marble, E. F., and R. W. Glidden, Attleborough, Mass., assignors to Whiting Manufacturing Company, New York, N. Y. Smelling-bottle stopper.	Apr. 15, 1873	599	188	3	430
142, 255	Marcar, H. H., and S. Mehaffey, Cambridge, Ohio. Washing-machine.	Aug. 26, 1873	782	258	4	225
144, 995	Marcell, M. R., assignor of one-half interest to W. H. Case, Dansville, N. Y. Crimping apparatus for boots, &c.	Nov. 25, 1873	718	242	4	571
	Marcellus, A. (See Wilkins & Marcellus.)					
137, 087	Marchand, A., Lyons, Mich. Table-leaf support.	Mar. 25, 1873	672	223	3	329
139, 681	Marchand, C. E., assignor of one-half interest to T. R. Morgan, Alliance, Ohio. Machine for beading sheet-metal ware.	June 10, 1873	222	71	3	643
137, 225	Marchand, H. E., Pittsburgh, Pa. Car-coupling.	Mar. 25, 1873	796	263	3	338
138, 669	Same. Safety-platform for cars.	May 6, 1873	179	57	3	512
139, 322	Same. Car axle-box.	May 27, 1873	792	252	3	593
144, 342	Same. Curtain-fixture.	Nov. 4, 1873	141	47	4	490
142, 639	Marchant, W. J., and H. B. Hart, Philadelphia, Pa. Needle-case.	Sept. 9, 1873	286	94	4	277
5, 638	Marcy, L. J., Philadelphia, Pa. Magic-lantern. (Reissue.)	Oct. 28, 1873	749	249	4	469
5, 686	Same. same. (Reissue.)	Dec. 16, 1873	611	200	4	659
143, 988	Marden, J. A., Boston, and T. S. Smith, assignors of one-third interest to T. G. Smith, Somerville, Mass. Feed-regulator for injectors.	Oct. 28, 1873	571	190	4	455
139, 323	Marelli, A., Milan, Italy, assignor of one-half interest to S. Marelli. Breech-loading fire-arms.	May 27, 1873	792	{ 252 } { 253 }	{ 3 }	593
	Marelli, S. (See Marelli, A., assignor.)					
144, 402	Margeson, J. B., Swampscott, Mass. Stair-rail molding-machine.	Nov. 11, 1873	202	68	4	506
142, 252	Margesson, A., Bangor, Me. Moccasin.	Aug. 26, 1873	780	257	4	225
143, 363	Marin, F., Geneva, Switzerland. Railway-car.	Sept. 30, 1873	920	312	4	365
	Marine Variometer Company. (See Cook, H. O., assignor.)					
135, 568	Maring, L., and E. Mertz, Basle, Switzerland. Hydrocarbon gas-apparatus.	Feb. 4, 1873	161	52	3	140
134, 997	Marion, F., and N. E. Wilson, Groveland, Ill. Hay-rake and loader.	Jan. 21, 1873	471	151	3	73
144, 853	Marker, S. A., Indianapolis, Ind. Harness-pad.	Nov. 25, 1873	603	205	4	561
140, 288	Markle, J. A., Philadelphia, Pa. Combined table, stool, and stand.	June 24, 1873	784	249	3	704
138, 907	Markley, F. A., Waynesborough, Va. Compound explosive projectile.	May 13, 1873	398	126	3	540
6, 884	Markley, H. H., and A. Mathiew, San Francisco, Cal. Watch-chain. (Design.)	Sept. 16, 1873			4	296
	Marks, G. W. (See Mageean & Marks.)					
135, 280	Marks, J. Y., Rochester, Pa. Fire-kindler.	Jan. 28, 1873	738		3	107
138, 266	Marks, S., San Francisco, Cal. Vessel for containing liquids under pressure.	Apr. 29, 1873	932	294	3	474
144, 119	Same. Beer-drawing attachments for casks, &c.	Oct. 28, 1873	683	226	4	464
138, 420	Marland, O., Boston, Mass. Marine steam-engine governor.	Apr. 29, 1873	1,069	337	3	485
140, 516	Marlin, J. M., New Haven, Conn. Revolving fire-arm.	July 1, 1873	149	51	4	20
139, 682	Marnette, H. I., Chicago, Ill. Horse-power.	June 10, 1873	222	71	3	643
	Marot, J. D. (See Lackman, J. M., assignor.)					
136, 442	Marquez, J. A., New York, N. Y. Machine for making matrices for stereotype-plates.	Mar. 4, 1873	76	26	3	251
134, 909	Marr, A. D., assignor to self and J. H. C. Munsey, Boston, Mass. Shirt.	Jan. 14, 1873	381	121	3	51
141, 881	Marr, J., Simcoe, Canada. Plow.	Aug. 19, 1873	446	145	4	188
	Marrin, J. J. (See Byrne, R., assignor.)					
135, 135	Marriott, A., Saint Louis, Mo. Water-heater for heating buildings.	Jan. 21, 1873	587	191	3	82
144, 996	Marriott, A., assignor to J. W. Branch, Saint Louis, Mo. Valve.	Nov. 25, 1873	719	243	4	571
	Marriott, T. (See Ball, C., assignor.)					
	Same. same. (Reissue.)					
145, 884	Marriott, T., Detroit, Mich. Nutmeg-grater.	Dec. 23, 1873	768	250	4	683
135, 042	Marrs, D., assignor of two-thirds interest to H. H. Marrs and G. B. Carter, Friends' Creek Township, Ill. Scraping and loading machine.	Jan. 21, 1873	513	166	3	76
	Marrs, H. H. (See Marrs, D., assignor.)					
	Mars, J. A. (See Cusenbary & Mars.)					
137, 939	Marsden, H. R., Leeds, England, assignor to the Blake Crusher Company and E. W. Blake, New Haven, Conn. Stone-crusher.	Apr. 15, 1873	600	188	3	430
142, 800	Marsh, C., 2d, Natchez, Miss. Plow.	Sept. 16, 1873	434	146	4	299
	Marsh, E. J. (See Dorsey, D. B., assignor.)					
137, 940	Marsh, J. F., Littleton, N. H. Elevator.	Apr. 15, 1873	600	189	3	430
140, 149	Marsh, J. F., Dubuque, Iowa. Street-lamp.	June 24, 1873	668	210	3	694
144, 466	Marsh, L., South Adams, Mass. Ash-sifter.	Nov. 11, 1873	255	86	4	510
	Marsh, P. J. (See Brownell, C., assignor.)					
	Marsh, P. Z. (See Lappin H., assignor.)					
139, 964	Marsh, R., Flushing, N. Y. Lamp.	June 17, 1873	484	152	3	671
140, 931	Marsh, W. W., and O. E. Miles, Sycamore, Ill. Windmill.	July 15, 1873	529	177	4	70
134, 554	Marshall, A. J., North Buffalo, N. Y. Bill and letter file.	Jan. 7, 1873	49	15	3	11
140, 207	Marshall, C., Lockport, N. Y. Metallic clasp.	June 24, 1873	716	226	3	698
144, 403	Marshall, C., Philadelphia, Pa. Coating iron and other metals with protecting alloys.	Nov. 11, 1873	203		4	506
144, 854	Marshall, E. N., Grand Rapids, Mich. Railway-signal.	Nov. 25, 1873	604	{ 205 } { 206 }	{ 4 }	561
139, 965	Marshall, G., New York, N. Y. Sawing-machine.	June 17, 1873	484	153	3	671
145, 356	Marshall, J., Cordova, Ill. Corn-sheller.	Dec. 9, 1873	287	96	4	621
	Marshall, J. C. (See Holt & Marshall.)					
	Marshall, J. C. (See Smith & Marshall.)					
138, 811	Marshall, J. C., San Francisco, Cal. Hoisting-whim.	May 13, 1873	317	98	3	533
143, 290	Marshall, M., assignor to self and D. Lane, Lowell, Mass. Machine for disintegrating fabrics.	Sept. 30, 1873	846	291	4	360
144, 685	Same. Machine for disintegrating fabrics.	Nov. 18, 1873	448	152	4	537
135, 831	Marshall, S. F., Wilmington, Del. Back-band of harness saddles.	Feb. 11, 1873	412	134	3	171
137, 698	Marshall, W. C., New York, N. Y. Apparatus and process for rendering lard.	Apr. 8, 1873	382	118	3	399
137, 699	Same. Apparatus for treating and drying animal matter.	Apr. 8, 1873	383	119	3	400
145, 958	Marston, D. W., and J. S. Skinner, Lebanon, N. H. Mop-head.	Dec. 30, 1873	854	278	4	701
137, 014	Marston, F. W., and O. Jones, Philadelphia, Pa. Car-coupling.	Mar. 18, 1873	595	197	3	311
140, 055	Marston, F. W., assignor to J. Morss, Philadelphia, Pa. Spirit-level.	June 17, 1873	565	178	3	678

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			pec.	Dr'g	Vol.	Page.
138, 670	Marston, H. C., Washington, D. C. Seal-lock for boxes	May 6, 1873	181	58	3	512
6, 935	Marston, J. M., Boston, Mass. Frame for machines	Oct. 7, 1873			4	300
134, 756	Marston, T. P., assignor to J. S. Loughery, New York, N. Y. Tag-fastener	Jan. 14, 1873	246	80	3	40
134, 757	Same.....Tag.....	Jan. 14, 1873	247	80	3	40
143, 364	Marston, T. P., and N. M. Phillips, New York, N. Y., assignor to N. M. Phillips. Tag-hook	Sept. 30, 1873	921	312	4	365
137, 700	Martin, A. C., Waddam's Centre, Ill. Corn-planter	Apr. 8, 1873	384	119	3	400
145, 115	Martin, A. C., and R. Ferguson, Lena, Ill. Corn-planter	Dec. 2, 1873	69	22	4	591
141, 007	Martin, B. F., and E. Mapes, Rochester, N. Y. Vest-supporter	July 22, 1873	615	208	4	87
134, 910	Martin, B. G., assignor to self and E. R. Esmond, New York, N. Y. Press for cheese, fruit, &c	Jan. 14, 1873	382	{ 121 } 122	{ 3 } 3	51
136, 846	Martin, B. G., New York, N. Y. Cotton-press	Mar. 18, 1873	453	150	3	300
	Martin, B. M. (See Martin, C. G. and B. M.)					
140, 056	Martin, C., Verviers, Belgium. Device for regulating the twist in spinning-frames	June 17, 1873	565	{ 178 } 179	{ 3 } 3	678
144, 686	Martin, C. G. and B. M., New York, N. Y. Water-gage for boilers	Nov. 18, 1873	449	152	4	538
	Martin, C. M. (See Martin, D. N., assignor)					
	Martin, C. M., et al. (See Stanton, J. W., assignor.)					
	Martin, D. D., et al. (See Newton, J. M., assignor.)					
5, 405	Martin, D. N., Lawrence, Mass., assignor to D. N. and C. M. Martin. Stove-door. (Reissue) ..	May 13, 1873	457	144	3	545
144, 343	Martin, E., Potsdam, N. Y. Milk-cooler	Nov. 4, 1873	142	47	4	490
134, 555	Martin, G. B., New York, N. Y. Construction of canal-boats	Jan. 7, 1873	49	15	3	11
138, 570	Martin, H., Duncan, Pa. Drilling-machine	May 6, 1873	94	30	3	505
138, 754	Martin, H., Chicopee, Mass., assignor of one-half interest to W. C. McCallan, Springfield, Mass. Brick-machine	May 13, 1873	268	83	3	529
140, 057	Martin, H. B., San Francisco, Cal. Brake reaction movement	June 17, 1873	567	179	3	678
	Martin, H. M. (See Reilley, J. O., assignor.)					
	Martin, J., et al. (See Hollenweger F. J., assignor.)					
136, 926	Martin, J., New York, N. Y. Machine for turning bags	Mar. 18, 1873	518	171	3	305
137, 143	Martin, J., Henry City, Ill. Thill-coupling	Mar. 25, 1873	719	238	3	332
141, 448	Martin, J., deceased, by L. Baker, administrator, and G. W. Wilson, Morenci, Mich. Machine for robbing bark	Aug. 5, 1873	34	11	4	138
	Martin, J. E. (See Cliff & Martin.)					
144, 278	Martin, L., Oswego, N. Y. Axle for vehicles	Nov. 4, 1873	91	30	4	485
	Martin, M. (See Fitzhugh, B. G., assignor.)					
	Martin, M., et al. (See Harris, S. W., assignor)					
135, 569	Martin, M., Baltimore, Md. Wash-boiler attachments	Feb. 4, 1873	162	52	3	140
142, 575	Martin, M., and J. A. Studer, Pittsburgh, Pa. Jewelers' show-case	Sept. 9, 1873	235	76	4	273
	Martin, N. D. (See Prince & Martin.)					
145, 667	Martin, P., Medford, assignor to self and E. S. Gilman, Somerville, Mass. Lamp-wick.	Dec. 16, 1873	568	187	4	655
137, 460	Martin, S., Knobnoster, Mo. Brick-machine	Apr. 1, 1873	162	51	3	370
140, 320	Martin, S., Parshallville, Mich. Washing-machine	July 1, 1873	38	12, 13	4	11
138, 571	Martin, S. H., Mount Vernon, N. Y. Extension-table	May 6, 1873	94	30	3	505
135, 652	Martin, T., Chelsea, Mass. Loom-shuttle	Feb. 11, 1873	251	79	3	159
	Martin, T. C. (See Stimens & Martin.)					
136, 661	Martin, T. M., assignor to self and A. S. Hallidie, San Francisco, Cal. Swivel-hoisting apparatus for mines	Mar. 11, 1873	287	96	3	277
143, 087	Same.....Saddle for wire-ways	Sept. 23, 1873	677	233	4	329
143, 173	Martin, W., Clarence, Iowa. Double-tree	Sept. 23, 1873	741	255	4	335
	Martincourt, C. T. (See Fowler, R. F., assignor.)					
134, 691	Martindale, H., assignor of one-half interest to J. R. Crow, Newark, Ind. Combined chair, table, and bureau	Jan. 7, 1873	182	59	3	21
141, 153	Martindale, R. H., Hobbieville, Ind. Thrashing-machine	July 22, 1873	747	246	4	97
140, 634	Martindale, W. C., Philadelphia, Pa. Horse hay-rake	July 8, 1873	264	90	4	41
6, 958	Martino, J., assignor to C. Noble & Co., Philadelphia, Pa. Stove	Oct. 14, 1873			4	401
140, 932	Marwedel, E., Washington, D. C. Apparatus for cleaning knives, forks, &c	July 15, 1873	531	177	4	70
144, 344	Marx, E., New York, N. Y. Saw	Nov. 4, 1873	142	48	4	490
	Marx, M. (See Spencer, C. B., assignor.)					
	Masac, T. (See Aschenbrenner, H. M., assignor.)					
142, 711	Mase, F. W., Oshkosh, Wis. Water-strainer	Sept. 9, 1873	346	116	4	282
145, 668	Same.....Seed-separator	Dec. 16, 1873	568	187	4	655
5, 411	Mashmeyer, J. A., Beardstown, Ill., assignor to S. S. Sargeant, Newark, N. J. Buckle. (Reissue)	May 13, 1873	464	146	3	546
	Mason & Hamlin Organ Company. (See Trowbridge, W. O., assignor.)					
	Mason, A. C., Chicago, Ill. Machine for wiring the joints of clothes-pins. (Extension) ..	Sept. 6, 1873			4	240
	Mason, A. J. (See Rogers & Mason.)					
	Mason, B. A. (See Bayard & Mason.)					
136, 662	Mason, C., New York, N. Y. Sample-fastener	Mar. 11, 1873	287	96	3	277
139, 592	Same.....Paper-file	June 3, 1873	128	43	3	619
139, 256	Mason, D. N., Indianola, Iowa. Heating-stove	May 27, 1873	735	232	3	588
137, 784	Mason, I., Brooklyn, N. Y. Bottom for sofas, &c	Apr. 15, 1873	470	147	3	419
142, 801	Mason, J., Detroit, Mich., and G. W. Rogers, Brooklyn, N. Y. Float for life-rafts	Sept. 16, 1873	435	146	4	299
133, 376	Mason, J. F., Johnstown, N. Y. Glove	Apr. 4, 1873			3	356
	Mason, J. L. (See Baker, C. L. W., assignor.)					
	Same.....(See Neuber & Perry, assignors.)					
137, 461	Mason, J. L., New Brunswick, N. J. Fruit-jar	Apr. 1, 1873	163	52	3	370
137, 462	Mason, J. L., New York, N. Y. Fruit-jar cover	Apr. 1, 1873	163	52	3	370
142, 251	Mason, M. B., Kansas City, Mo., assignor to self and J. S. McCrum. Spark-arrester for locomotives	Aug. 26, 1873	779	257	4	225
142, 488	Mason, O. R., Binghamton, N. Y. Device for thawing ice from water or gas pipes	Sept. 2, 1873	152	49	4	254
	Mason, R. D. (See Neill, W. J., assignor.)					
145, 885	Mason, S., Hamden, Conn. Carriage-pole tip	Dec. 23, 1873	768	251	4	684
134, 814	Mason, W. B., Boston, Mass. Parallel-ruler	Jan. 14, 1873	298	96	3	44
145, 436	Mason, W. M., Buffalo, N. Y. Apparatus for sweating hides or skins	Dec. 9, 1873	355	119	4	626
	Massey, B. (See Downing, W. H., assignor.)					
143, 518	Massey, G. B., assignor to self and A. B. Darling, New York, N. Y. Hoisting-apparatus.	Oct. 7, 1873	100	35	4	389
143, 519	Massey, G. B., and A. B. Darling, New York, N. Y. Hoisting-apparatus	Oct. 7, 1873	102	35	4	389
	Massey, J. (See Cockcroft & Ackroyd, assignors.)					
142, 640	Massey, J., Chester, Pa. Metallic piston-packing	Sept. 9, 1873	287	94	4	277
145, 669	Massey, W. W., Baltimore, Md. Curtain-fixture	Dec. 16, 1873	569	187	4	655
143, 919	Masten, J., assignor of one-half interest to J. P. Coe, Lee, Ohio. Churn	Oct. 21, 1873	489	165	4	438
135, 436	Masterman, W. H., and W. T. Hooper, Stockton, Cal. Car-stake supporter	Feb. 4, 1873	41	12	3	131
139, 073	Masterton, W., Stockton, Cal. Sacking attachment for thrashing-machines	May 20, 1873	555	174	3	566
	Masury, J. W., Brooklyn, N. Y. Paint-can, &c	July 12, 1873			4	35
141, 061	Same.....Paint-vessel and package	July 22, 1873	659	222	4	90

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 670	Masury, J. W., Brooklyn, N. Y. Can for paint, &c	Dec. 16, 1873	570	187	4	656
143, 631	Matchet, J. F., and P. W. Smith, Paris, Mo. Wheel cultivator	Oct. 14, 1873	215	72	4	407
135, 234	Mather, E., assignor to F. Sturges & Co., Chicago, Ill. Spittoon	Jan. 28, 1873	698	224	3	104
140, 289	Matherly, J. C., Irvine, Ky. Hemp-brake	June 24, 1873	785	249	3	704
137, 701	Mathews, A. J. (See Perry & Mathews.)					
	Mathews, J. W., Kilbourne, Ohio. Rail-fence	Apr. 8, 1873	385	119	3	400
	Mathias, D. H., et al. (See Van Derzee, C., assignor.)					
6, 806	Mathien, A. (See Markley & Mathien) (Design.)					
144, 782	Mathieson, C. A., and J. C. Schrader, New York, N. Y. Seal-press	Aug. 19, 1873			4	185
138, 267	Mathis, W., New York, N. Y. Heel-boot for horses	Nov. 18, 1873	529	180	4	544
142, 167	Mathivet, J. V., Cleveland, Ohio. Ventilating water-closet bowls	Apr. 29, 1873	933	295	3	475
141, 721	Matson, A., Quincy, Ill. Steam-engine governor	Aug. 26, 1873	708	234	4	219
	Matson, M., assignor of one-half interest to J. H. Sundermann, Quincy, Ill. Whiffletree-hook	Aug. 12, 1873	284	93	4	166
134, 911	Mattfeld, H., assignor of half interest to I. Coleman, New York, N. Y. Water-proof wall	Jan. 14, 1873	384	122	3	51
139, 800	Matthews, A. J., Hartwell, Ga. Animal-trap	June 10, 1873	339	105	3	652
	Matthews Brothers. (See Hindman, S. B., assignor.)					
139, 074	Matthews, E. G., Oakham, Mass. Seed-drill	May 20, 1873	556	175	3	566
	Matthews, E. R., et al. (See Hunt, F. B., assignor.)					
137, 226	Matthews, J., New York, N. Y. Metal-lined, copper, and other vessels	Mar. 25, 1873	797		3	338
137, 702	Same. Soda-water apparatus	Apr. 8, 1873	386	119	3	400
137, 941	Same. Device for closing bottles and other vessels	Apr. 15, 1873	601	189	3	430
138, 171	Same. Cap to prevent the bursting of carbonic-acid and other vessels	Apr. 22, 1873	818	260	3	457
138, 421	Same. Apparatus for filling bottles	Apr. 29, 1873	1,073	238	3	485
138, 671	Same. Apparatus for cooling and dispensing beverages	May 6, 1873	182	58	3	512
138, 908	Same. Carbonic-acid generator, fountain, and other vessels	May 13, 1873	398		3	540
139, 722	Same. Box for holding and transporting bottles	June 10, 1873	266	83	3	646
141, 154	Same. Apparatus for dispensing soda-water and other beverages	July 22, 1873	747	{ 246 } 247	4	97
141, 229	Same. Device for dispensing sirup in soda-water apparatus	July 29, 1873	833	272	4	111
141, 571	Same. Apparatus for charging liquids with carbonic acid	Aug. 5, 1873	139	44	4	146
144, 913	Same. Holder for soda-water tumblers	Nov. 25, 1873	648	220	4	565
135, 927	Matthews, J. R., Cincinnati, Ohio. Canning fruit	Feb. 18, 1873	504	164	3	193
	Matthews, W. J. (See Scott & Matthews.)					
144, 404	Matthias, W. N., et al. (See Hunt, F. B., assignor.)					
	Matthias, J., New York, N. Y. Match-box	Nov. 11, 1873	204	69	4	506
	Matthiessen, F. W. (See Hegeler & Matthiessen.)					
	Mattullath, J. F. H. (See Wagner, H. E., assignor.)					
	Maule, F. I. (See Pancoast & Maule.)					
139, 171	Maurice, C. C., New York, N. Y. Lithographic press	May 20, 1873	647	202	3	573
	Mawhinney, H. H. (See Wiggins, J. E., assignor.)					
143, 582	Maxfield, A. C., Biddeford, Me. Shaft-holding attachment for carriages	Oct. 14, 1873	173	58	4	403
145, 886	Maxheimer, J., New York, N. Y. Bird-cage	Dec. 23, 1873	769	251	4	684
5, 247	Maxim Gas-Machine Company of New York. (See Maxim, H. S., assignor.) (Reissue.)					
	Maxim, H. S., New York, N. Y., assignor by mesne assignment to "Maxim Gas-Machine Company of New York." Carbureter	Jan. 21, 1873	643	209	3	87
141, 062	Maxim, H. S., Brooklyn, N. Y. Fire-extinguisher	July 22, 1873	661	223	4	90
141, 063	Maxim, H. S., and L. P. Hawes, Brooklyn, N. Y. Steam-trap	July 22, 1873	663	223	4	91
145, 671	Maxon, W. P., Independence, Iowa. Rotary engine	Dec. 16, 1873	572	188	4	656
141, 155	Maxson, W. P., Elmira, N. Y. Rotary pump or engine	July 22, 1873	750	247	4	97
136, 443	May, C., Cincinnati, Ohio. Bureau or wardrobe bedstead	Mar. 4, 1873	77	27	3	251
	May, E., Indianapolis, Ind. Construction of prisons	Oct. 4, 1873			4	353
136, 744	May, E. M., Fond du Lac, Wis. Sign	Mar. 11, 1873	356	117	3	283
141, 882	Same. Mold for ice-cream, jellies, &c	Aug. 19, 1873	446	145	4	188
5, 416	May, H. M., Birmingham, Conn. Bustle	May 20, 1873	700	219	3	578
136, 330	May, R. B., Murfreesborough, Tenn. Animal-trap	Feb. 25, 1873	886	278	3	233
134, 998	May, W., Binghamton, N. Y. Apparatus for preparing waxed ends	Jan. 21, 1873	472	151	3	73
	Mayall, T. J., Boston, Mass. Manufacture of emery wheels and sticks	Jan. 11, 1873			3	7
	Same. Method of combining emery with caoutchouc	Oct. 11, 1873			4	379
	Same. Manufacture of india-rubber hose	Nov. 29, 1873			4	557
140, 208	Same. Rubber and plumbago compound for bearings and other purposes	June 24, 1873	716		3	698
140, 209	Same. Manufacture of artificial leather and similar fabrics	June 24, 1873	717	226	3	698
140, 517	Same. Bottle-stopper	July 1, 1873	150	51	4	20
140, 518	Same. Nursing-bottle	July 1, 1873	151	51	4	20
140, 519	Same. Vulcanizing rubber belting, &c	July 1, 1873	151	52	4	21
140, 784	Same. Hose reel	July 15, 1873	393	135	4	60
140, 933	Same. Machine for cutting rubber sheets into strips	July 15, 1873	531	177	4	71
140, 934	Same. Machine for the manufacture of hose	July 15, 1873	533	178	4	71
141, 368	Same. Implement for washing windows, &c	July 29, 1873	968	315	4	122
143, 583	Same. Fumigator for hospital and other uses	Oct. 14, 1873	173	59	4	403
143, 705	Same. Piston-packing	Oct. 14, 1873	288	95	4	412
144, 977	Same. Hose-coupling	Nov. 25, 1873	719	243	4	571
144, 998	Same. Apparatus for mixing vulcanizable compounds for rubber, &c	Nov. 25, 1873	721	243	4	571
146, 085	Same. Apparatus for delivering sheets from printing-presses	Dec. 30, 1873	961	{ 310 } 311	4	710
135, 437	Mayer, A., Detroit, Mich. Automatic relief-valve for steam fire-engines	Feb. 4, 1873	41	12	3	131
143, 920	Same. Relief-valve for fire-engines	Oct. 21, 1873	489	165	4	438
	Mayer, A. M. (See Barker & Mayer.)					
138, 812	Mayer, C., Baltimore, Md. Lamp	May 13, 1873	318	98	3	533
	Mayer, F. B. (See Koppitz & Mayer.)					
	Mayer, I. C. (See Christolm & Mayer.)					
139, 801	Mayer, J., Elmer, N. Y. Spring for vehicles	June 19, 1873	340	105	3	652
144, 627	Mayes, T., Albany, N. Y. Overflow-alarm	Nov. 18, 1873	450	152	4	538
140, 935	Mayfield, W. D., and J. M. Payne, Fort Worth, Tex. Scraper	July 15, 1873	536	178	4	71
143, 366	Mayhew, A. P., and I. D. Leonard, Newark, N. J. Scarf-ring	Sept. 30, 1873	922	312	4	365
144, 914	Maynard, A. M., Savoy, Mass. Weighing and price balances	Nov. 25, 1873	649	220	4	565
135, 928	Maynard, E., New York, N. Y. Breech-loading fire-arm	Feb. 18, 1873	505	164	3	193
	Maynard, W. (See Taylor, W., assignor.)					
136, 081	Maynard, W., Salem, Mass. Apparatus for the manufacture of gases	Feb. 18, 1873	635	208	3	203
136, 082	Same. Process for treating hides and skins	Feb. 18, 1873	636		3	203
140, 150	Mayne, T. T., Philadelphia, Pa. Manufacture of latch-needles	June 24, 1873	669	210	3	694
	Mayo, J. J. (See Mitchell & Mayo.)					
136, 529	Mayo, W. H., Orono, Me. Excelsior machine	Mar. 4, 1873	159	51	3	258
5, 295	Mayor, T., Providence, R. I. Flier for roving and spinning frames	Feb. 25, 1873	891	287	3	235

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 520	Maze, D. B., West Buffalo, Ohio. Harrow.....	Oct. 7, 1873	103	36	4	389
140, 210	McAdams, G., Vevay, Ind. Cooking-stove.....	June 24, 1873	719	226	3	698
144, 625	McAllister, W., Lawrence, Mass. Protecting buildings against fire.....	Nov. 18, 1873	398	133	4	533
136, 083	McAninch, J. C., and G. Atkins, Youngstown, Ohio. Fettling for puddling and boiling furnaces.....	Feb. 18, 1873	637	.....	3	203
142, 405	McAnulty, J. D., Brooklyn, N. Y. Letter-envelope.....	Sept. 2, 1873	76	25	4	248
141, 941	McAuliffe, J., New York, N. Y. Umbrella.....	Aug. 19, 1873	492	163	4	192
138, 339	McAvoy, H. L., Baltimore, Md. Steam-power air-brake.....	Apr. 29, 1873	999	314	3	480
139, 906	Same. Fire-extinguisher.....	June 17, 1873	441	137	3	667
139, 723	McBride, J., Ithaca, N. Y. Butter-worker.....	June 10, 1873	267	84	3	646
138, 909	McBurney, W. H., Sacramento City, Cal. Hay and cotton press.....	May 13, 1873	399	126	3	540
	McCabe, G. H., executor. (See Lewis, D. D.)..... (Extension.)					
137, 854	McCafferty, J., New York, N. Y. Composition-paint oils.....	Apr. 15, 1873	531	.....	3	424
	McCabill, B. F. (See Shyrma, A. F., assignor.)					
139, 907	McCall, M., and R. O. Wood, Buffalo, N. Y. Safe-vault.....	June 17, 1873	442	138	3	667
	McCallan, W. C. (See Martin, H., assignor.)					
	McCallum, Crease & Sloan. (See Heald, A., assignor.)..... (Design.)					
	McCambridge, A., et al. (See Gordon, W., assignor.)					
137, 614	McCandlish, C. N., and J. C. Naginey, West Rushville, Ohio. Harvester.....	Apr. 8, 1873	308	96	3	393
5, 615	McCarthy, E. P., assignor to self and J. B. Grant, San Francisco, Cal. Wagon-spring. (Reissue).....	Oct. 21, 1873	520	174	4	431
134, 556	McCarthy, F., Chicago, Ill. Shade and draught-blower for grates.....	Jan. 7, 1873	50	15	3	11
140, 211	Same. Cuff-button.....	June 24, 1873	720	226	3	698
138, 034	McCarthy, W. C., Pittsburgh, Pa. Apparatus for cleaning cess-pools, &c.....	Apr. 22, 1873	704	222 } 223 }	3	448
143, 414	McCarty, T. J., Salem, Ohio. Stock-car.....	Oct. 7, 1873	18	7	4	382
139, 593	McCarver, T. J., J. Athey, and B. Jennings, Oregon City, Ore. Telegraph-pole.....	June 3, 1873	129	43	3	619
137, 308	McCauley, J., Elkton, Md. Changeable-gage railway-truck.....	Apr. 1, 1873	26	8	3	353
	McCauley, J. D., et al. (See Kugler, O., assignor.)					
134, 999	McCauley, R. A., Baltimore, Md. Attachment for wash-boilers.....	Jan. 21, 1873	472	151	3	73
136, 745	McCaullay, J. E., Philadelphia, Pa. Hose-bridge.....	Mar. 11, 1873	357	118	3	283
144, 626	McChesney, R., Ilion, N. Y. Wood-joining.....	Nov. 18, 1873	399	133 } 134 }	4	533
145, 357	McClean, J., assignor to F. Cook, New Orleans, La. Device for forming bale-ties.....	Dec. 9, 1873	288	96, 97	4	624
136, 927	McCleary, J., Martin's Ferry, Ohio. Molders' pot or ladle.....	Mar. 18, 1873	520	171	3	305
	McClelland, J. A. (See Westover, G. C., assignor.)					
143, 772	McClelland, J. A., Louisville, Ky. Collodion compound.....	Oct. 21, 1873	365	121	4	428
	McClelland, J. C. (See Beach, T., assignor.)					
146, 011	McClelland, W., sr., Fowler, Ill. Draught-equalizer.....	Dec. 30, 1873	901	292	4	705
5, 404	McClintock, J. R., Mobile, Ala., and J. Cumberland, deceased, assignors by mesne assignment to A. J. Aiken, New Orleans, La. Cotton-bale tie..... (Reissue).....	May 13, 1873	456	144	3	545
	McClung, C. L. (See Sharp & McClung.)					
139, 324	McClunie, T., Hartford, Conn. Metallic-gutter.....	May 27, 1873	793	253	3	593
144, 345	McClure, J. E., San Francisco, and D. H. Ainsworth, Salinas, Cal. Blow-pipe.....	Nov. 4, 1873	143	48	4	490
144, 551	McClure, J. F., Connersville, Ind. Velocipede.....	Nov. 11, 1873	329	111	4	516
135, 281	McClure, W., Sinking Spring, Ohio. Rotary churn.....	Jan. 28, 1873	738	238	3	107
135, 235	McClure, W. B., assignor to self, H. O. Claughton, and J. C. Graham, Alexandria, Va. Back-chain for cart-saddles.....	Jan. 28, 1873	699	224	3	104
134, 758	McClymond, C. B., Elderton, Pa. Whiffletree.....	Jan. 14, 1873	247	81	3	40
	McCollin, T. H., et al. (See Schofield, J., assignor.)					
138, 172	McColloch, S. L., Wheeling, West Va. Harvester.....	Apr. 22, 1873	819	260 } 261 }	3	457
141, 572	McCollom, A. J., and G. D. Emery, Indianapolis, Ind. Saw-swage.....	Aug. 5, 1873	140	45	4	147
5, 616	McComb, D., deceased, by M. A. McComb, administratrix, Memphis, Tenn. Bale-tie. (Reissue).....	Oct. 21, 1873	521	174	4	441
	McComb, J. J. (See Brodie, G., assignor.)..... (Reissue.)					
144, 999	McComb, J. M., Lancaster, Ohio. Paper-hanger's brush.....	Nov. 25, 1873	721	243	4	571
	McComb, M. A., administratrix. (See McComb, D.)..... (Reissue.)					
139, 172	McConnell, B., Philadelphia, Pa. Combined heating and cooking stove.....	May 20, 1873	648	202	3	573
	McConnell, H. (See Cutter, S., assignor.)					
143, 291	McConnell, R., W. Truesdell, and F. Mertsheimer, Omaha, Nebr. Self-closing faucet attachment.....	Sept. 30, 1873	847	292	4	360
141, 573	McConnell, W., Philadelphia, Pa. Sponge-cup.....	Aug. 5, 1873	141	45	4	147
	McConnico, A. J., et al. (See Buford, A. G., assignor.)					
138, 422	McCool, W. A., Ashland, Ohio. Screw-forming machine.....	Apr. 29, 1873	1,074	338	3	485
144, 552	McCool, W. C., Guthrie Centre, Iowa, assignor of one-half interest to D. H. Brumbaugh. Plow.....	Nov. 11, 1873	330	111	4	516
	McCormick, C. H. (See Young, M., jr., assignor.)..... (Disclaimer.)					
139, 406	McCormick, G. W., Saint Francis County, Ark. Churn-dasher.....	May 27, 1873	870	278	3	599
137, 785	McCormick, H. T., Selma, Ala. Automatic fan.....	Apr. 15, 1873	471	147	3	419
	McCormick, L. J. (See Young, M., jr., assignor.)..... (Disclaimer.)					
143, 365	McCosker, P., assignor of one-half interest to H. Schmidt, Pittsburgh, Pa. Clamp for securing advertising boxes to lamp and other posts.....	Sept. 30, 1873	921	312	4	365
	McCoy, C. L. (See Heberling, J., assignor.)					
139, 407	McCoy, E., assignor of one-half interest to S. M. Cutcheon and E. P. Allen, Ypsilanti, Mich. Lubricator.....	May 27, 1873	871	279	3	599
138, 423	McCoy, W. H., Miller's Falls, Mass. Tool-handle.....	Apr. 29, 1873	1,074	338	3	486
136, 084	McCracken, E. D., New York, N. Y., assignor to L. A. Bigelow, trustee, Boston, Mass. Gas-lighter.....	Feb. 18, 1873	637	209	3	203
138, 340	McCray, W., Black Oak, Mo. Pruning-shears.....	Apr. 29, 1873	1,000	315	3	480
5, 630	McCreary, J., Middletown, Pa. Coupling and steering apparatus..... (Reissue).....	Oct. 28, 1873	739	246	4	469
134, 912	McCreary, N. B., Phelps City, Mo. Grocers' sample-case.....	Jan. 14, 1873	384	122	3	51
136, 847	McCreight, A., and R. W. Glasgow, Tranquility, Ohio. Cider and wine mill.....	Mar. 18, 1873	454	150	3	300
	McCrum, J. S. (See Mason, M. B., assignor.)					
	McCullough, J. G. (See Tucker, W. B., assignor.)					
	McCully, N. (See Shales & McCully.)..... (Design.)					
	McCune, J. S. (See Bisbing & McCune.)					
137, 227	McCutchen, J. F., Philadelphia, Pa. Eccentric-rod for steam-engines.....	Mar. 25, 1873	798	263	3	338
	McDermott, J. J., et al. (See Cuddy, J., assignor.)					
	Same. (See Herron, W. M., assignor.)					
135, 653	McDermott, J. W., New York, N. Y. Revolving paddle.....	Feb. 1, 1873	252	80	3	159
145, 000	McDonald, A., Cumberland, Md. Means for operating screw-propellers.....	Nov. 25, 1873	722	244	4	571
135, 236	McDonald, A. R., Chicago, Ill. Steam-generator.....	Jan. 28, 1873	700	224	3	104
135, 136	McDonald, C., Ottawa, Ill. Table cutlery.....	Jan. 21, 1873	589	191	3	82
138, 572	McDonald, D. C., Rushford, N. Y. Horse hay-fork.....	May 6, 1873	95	30	3	505

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140, 936	McDonald, E. H., Wytheville, Va., assignor of one-half interest to S. Y. Towson, Saint Louis, Mo. Wash-boiler.....	July 15, 1873	537	179	4	71
	McDonald, F. L. (See Henderson & McDonald.)					
5, 500	McDonald, H., Pittsburgh, Pa. Puddling-furnace..... (Reissue)	July 22, 1873	793	260	4	101
139, 683	Same..... Reverberatory-furnace.....	June 10, 1873	223	72	3	643
137, 703	McDonald, I. R., Nevada, Iowa. Cultivator.....	Apr. 8, 1873	387	120	3	400
	McDonald, J. W. (See Beery & McDonald.)					
139, 966	McDonald, P. J., San Francisco, Cal. Steam-plow.....	June 17, 1873	485	153	3	671
	McDonald, T. (See Weston, E. R., assignor)..... (Reissue.)					
135, 237	McDonald, T. E., Trenton, N. J. Clothes-wringer.....	Jan. 28, 1873	701	{ 224 225 }	3	104
144, 627	McDonald, T. E., New Brunswick, N. J. Clothes-wringer.....	Nov. 18, 1873	400	134	4	533
137, 557	McDonald, W. D., Randolph, N. Y. Milk-cooler.....	Apr. 8, 1873	260	80	3	389
	McDonald, W. H. (See Smith, B. B., assignor.)					
144, 346	McDonell, A. S., Osgoode Township, Canada. Cultivator.....	Nov. 4, 1873	144	48	4	490
5, 292	McDougall, A., Manchester, England, assignor by mesne assignment to J. S. Millar, Montreal, Canada. Insect-destroying and disinfecting compound..... (Reissue)	Feb. 18, 1873	687		3	206
135, 995	McDougall, J., London, England. Fertilizer.....	Feb. 18, 1873	560		3	197
138, 755	McDowell, W. L., Philadelphia, Pa. Window-sash.....	May 13, 1873	269	83	3	529
135, 137	McDuffey, W. N., and B. F. Jaques, assignors of one-third interest to D. W. Lassiter, Petersburg, Va. Coupling for steam-heating apparatus for railway-cars.....	Jan. 21, 1873	589	191	3	82
137, 309	McElhiney, J. T., Moberly, Mo. Combined corn-planter and plow.....	Apr. 1, 1873	27	8, 9	3	359
	McEvers, C. N. (See Long & McEvers.)					
144, 405	McEvoy, D. J., Charlestown, Mass. Medical compound or salve.....	Nov. 11, 1873	205		4	506
141, 722	McEvoy, J., Brooklyn, N. Y. Adjustable treadle for sewing-machines, &c.....	Aug. 12, 1873	285	93	4	166
	McFarlan, W. W. (See Bock, H., assignor)..... (Reissue.)					
140, 425	McFarland, J. M., Golden City, Colo. Stamp for crushing ores.....	July 1, 1873	69	25	4	14
143, 706	McFarland, N. S., Williamsburgh, N. Y. Hoisting-apparatus.....	Oct. 14, 1873	290	95	4	412
135, 238	McGarrah, J. H., assignor to S. Ward, Princeton, Ind. Breeching loop-buckles.....	Jan. 28, 1873	702	225	3	104
137, 942	McGarth, R. M., La Fayette, Ind. Corn-sheller.....	Apr. 15, 1873	602	189	3	430
134, 913	McGaughey, A. E., East Minneapolis, Minn. Steam-plow.....	Jan. 14, 1873	385	{ 122 123 }	3	51
	McGaw, H. L. (See Bryant, S. H. and J. M., and McGaw.)					
144, 915	McGee, B. J., assignor to J. W. Tuttle, Watertown, Mass. Knit fabric.....	Nov. 25, 1873	650	221	4	565
	McGee, S. (See Buren, F. P., assignor.)					
135, 570	McGee, S., Madison, assignor of one-fourth interest to J. S. Adams and F. H. Fairchild, Morristown, N. J. Hub for vehicles.....	Feb. 4, 1873	163	53	3	140
140, 717	McGeorge, J., Bellaire, Ohio. Drop-hammer.....	July 8, 1873	333	113	4	47
143, 521	McGill, C., New Haven, Conn. Machine for wiring blinds.....	Oct. 7, 1873	103	36	4	389
7, 003	McGill, G. W., New York, N. Y. Inkstand..... (Design)	Nov. 25, 1873			4	558
145, 809	Same..... Letter-clip and paper-binder combined.....	Dec. 23, 1873	700	230	4	678
136, 606	McGill, W. C., Cincinnati, Ohio. Combination lock.....	Mar. 11, 1873	239	81	3	274
139, 472	Same..... Button-hole cutter.....	June 3, 1873	26	8	3	611
144, 688	Same..... Spring bed-bottom.....	Nov. 18, 1873	451	153	4	538
140, 290	McGilvray, L. T., Staunton, Va. Velocipede.....	June 24, 1873	786	249	3	704
141, 574	McGinniss, C., and W. Naylor, Chicago, Ill. Smoke-burning furnace.....	Aug. 5, 1873	141	45	4	147
	McGinnis, L. H. (See Thornburg, J. W., assignor.)					
136, 444	McGinty, J. M., and T. Nolan, Moulton, Tex. Machine for making plow-irons.....	Mar. 4, 1873	78	27	3	252
143, 632	McGinty, R. H., Moulton, Tex. Picket-fence.....	Oct. 14, 1873	216	73	4	407
141, 156	McGlenn, M., Aurora, Ill. Compound for cleaning polished metals.....	July 22, 1873	751		4	97
140, 837	McGlew, T., Austin, Nevada. Shaft furnace for roasting ores.....	July 15, 1873	440	150	4	63
140, 520	McGonegal, H. G., Washington, D. C. Apparatus for preserving wood.....	July 1, 1873	152	52	4	21
5, 456	McGovern, H. D., Brooklyn, N. Y. Sun-shield for horses..... (Reissue)	June 17, 1873	625	196	3	682
140, 058	Same..... Nose-bag for horses.....	June 17, 1873	567	179	3	678
138, 511	McGovern, P., assignor to G. L. Davis, J. A. Wiley, J. M. Stone, G. G. Davis, J. H. Stone, and J. H. Davis, North Andover, Mass. Self-acting spinning-mule.....	May 6, 1873	38	13, 14	3	500
143, 292	McGowan, J. H., and D. B. Caldwell, Cincinnati, Ohio. Crank-connection for steam-engines McGowan Pump Company. (See Morton, J., assignor)..... (Reissue.)	Sept. 30, 1873	848	292	4	360
145, 001	McGrath, T. H., San Antonio, Tex. Saddle.....	Nov. 25, 1873	723	244	4	571
140, 718	McGraw, G. V., Mankato, Minn., assignor to C. Parker, Meriden, Conn. Cartridge capping and uncapping device.....	July 8, 1873	335	113	4	47
145, 887	McGregor, F. B., Pontiac, Mich. Piano-truck.....	Dec. 23, 1873	769	251	4	684
5, 253	McGregor, G., and G. Vall, Cincinnati, Ohio, assignors by mesne assignment to W. A. Hopkins and F. Z. Dickinson. Sash-lock..... (Reissue)	Jan. 21, 1873	650	210	3	87
142, 033	McGregory, C. E., East Corinth, Me. Machine for notching shingle-bands.....	Aug. 19, 1873	573	189	4	199
139, 594	McGrew, J., Ravenswood, W. Va. Machine for cutting hoop-locks.....	June 3, 1873	129	43	3	619
142, 712	McGroder, B., and H. Tiedemann, Cleveland, Ohio. Wrecking-apparatus.....	Sept. 9, 1873	346	{ 116 117 }	4	282
145, 437	McGuffie, A., Buffalo, N. Y. Angle-iron cutter.....	Dec. 9, 1873	356	119	4	626
140, 212	McGuire, D., Northampton, Mass. Machine for cutting screws.....	June 24, 1873	721	227	3	698
145, 959	McGuire, J. R., Ansonia, Conn. Fifth wheel for vehicles.....	Dec. 30, 1873	855	278	4	701
138, 672	McGuire, T. D., Brooklyn, N. Y. Cigar mold.....	May 6, 1873	183	58	3	512
137, 015	McHarg, J. B., Rome, N. Y. Fishing-rod.....	Mar. 18, 1873	596	197	3	311
140, 059	McHarg, W. S., and A. B. Hill, New Haven, Conn. Sewer-cleaning truck.....	June 17, 1873	568	179	3	678
137, 704	McIlhenney, G. A., Washington, D. C. Gas-retort closings.....	Apr. 8, 1873	388	120	3	400
142, 253	Same..... Closing gas-retorts.....	Aug. 26, 1873	780	357	4	225
145, 672	Same..... Gas-retort.....	Dec. 16, 1873	572	188	4	656
136, 607	McIntire, S., Brooklyn, N. Y. Baby-carriage.....	Mar. 11, 1873	240	81	3	274
	McIntire, S. C. (See Baker & McIntire.)					
138, 910	McIntosh, O. T., New York, N. Y. Hoisting and conveying apparatus.....	May 13, 1873	400	126	3	540
137, 310	McIntosh, P. E., Chicago, Ill. Wrench.....	Apr. 1, 1873	29	9	3	359
142, 489	McIntyre, J. C., Fort Edward, N. Y. Lath-bolting machine.....	Sept. 2, 1873	153	49, 50	4	254
136, 530	McIntyre, M. F., Girard, Pa. Railway-rail joint.....	Mar. 4, 1873	160	52	3	258
136, 848	Same..... Washer for nut-locks.....	Mar. 18, 1873	454	150	3	300
137, 463	Same..... Railway-rail.....	Apr. 1, 1873	164	52	3	370
130, 035	McIntyre, P., Hartford, Conn. Mold for earthen pipe.....	Apr. 22, 1873	706	223	3	448
142, 168	Same..... same.....	Aug. 26, 1873	709	234	4	219
141, 803	McIntyre, T. K., assignor to H. A. Peaslee and J. R. Arnold, Salem, Mass. Loom-shuttle.....	Aug. 12, 1873	361	119	4	172
	McKay, C. (See Bush, I., assignor.)					
	McKay, E. E. (See Anderson, T. D., assignor.)					
	McKay, G., trustee. (See Blake & Libby, assignors)..... (Reissue.)					
	Same..... (See Keith, C. A., assignor.)					
	Same..... (See Wesson, M., assignor)..... (Reissue.)					
141, 008	McKay, W., assignor to self and C. E. Bayley, Newburyport, Mass. Lantern.....	July 22, 1873	616	208	4	87
6, 636	McKee, H. S., Pittsburgh, Pa. Bread-plate..... (Design)	May 6, 1873			3	497

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 846	McKeever, S., United States Army. Cartridge-box.....	June 10, 1873	377	117	3	655
139, 847	Same..... same.....	June 10, 1873	378	117	3	655
140, 151	Same..... Sword-hanger.....	June 24, 1873	670	210	3	694
137, 705	McKeever, W., Staunton, Va. Harvester cutter.....	Apr. 8, 1873	388	120	3	400
	McKellip, W. A. (See Baxter, S. T., assignor.)					
	McKenna, A. (See McKenna, J., A., & T.)					
141, 942	McKenna, J., Cambria, Pa. Mold or box for brick-presses.....	Aug. 19, 1873	493	163	4	192
144, 213	McKenna, J., A., & T., Pittsburgh, Pa. Faucet.....	Nov. 4, 1873	39	12	4	481
5, 663	McKenna, R., White's Station, Tenn. Cotton-gin..... (Reissue)	Nov. 18, 1873	567	192	4	547
	McKenna, T. (See McKenna, J., A., & T.)					
143, 021	McKenna, W., Boston, Mass. Setting diamonds or carbon points in the faces of metal tools.....	Sept. 23, 1873	622	212	4	325
5, 307	McKenney, A., Maumee City, Ohio. Railway-rail..... (Reissue)	Mar. 4, 1873	209	69	3	262
5, 308	Same..... Nut-locking device for railway-rail joints..... (Reissue)	Mar. 4, 1873	210	69	3	262
139, 802	McKenzie, D., Brooklyn, N. Y. Baker's oven.....	June 10, 1873	340	105	3	652
143, 522	Same..... same.....	Oct. 7, 1873	105	36, 37	4	389
140, 152	McKenzie, J., Saint Clair, Mich. Pitman-lubricator for saw-mills.....	June 24, 1873	671	210	3	694
141, 284	McKenzie, W. S., Rockwall, Tex. Farm-fence.....	July 29, 1873	884	290	4	116
	McKeown, M. C. (See Sinclair, J. A., assignor.)					
	McKibbin, J. C., et al. (See West & Fish, assignors.)					
	McKiernan & Finnegan. (See McKiernan, S. G., assignor.)					
145, 116	McKiernan, S. G., assignor to McKiernan & Finnegan, Paterson, N. J. Extensible brace for supporting trenches.....	Dec. 2, 1873	71	22	4	591
134, 914	McKimm, E. N., and J. R. Gearhart, Lathrop, Mo. Feather-renovater.....	Jan. 14, 1873	386	123	3	51
139, 013	McKinley, R., Hyde Park, N. Y. Rotary cultivator.....	May 20, 1873	498	157	3	561
	McKinnie, W. S. (See Williams & McKinnie.)					
142, 169	McKinnon, D., assignor to E. Brown, Wappinger's Falls, N. Y. Head-band.....	Aug. 26, 1873	710	235	4	219
136, 254	McKinnon, K., Pleasant Hill, Ala. Cultivator.....	Feb. 25, 1873	798	259	3	228
145, 222	Same..... Cultivator-plow.....	Dec. 2, 1873	165	57	4	598
135, 832	McKinstry, J. A., and W. Walden, Springfield, Mass. Miter-box.....	Feb. 11, 1873	413	134	3	171
140, 060	McKnight, A. C., Philadelphia, Pa. Machine for making boot and shoe heels.....	June 17, 1873	569	{ 180 } { 181 }	{ 3 }	678
	McKnight, D. M. (See Freed, W. H., assignor.)					
144, 855	McKnight, J. J., assignor to self and A. Storms, Tarrytown, N. Y. Hat-conformator.....	Nov. 25, 1873	605	206	4	561
	McLagon, J., et al. (See Duckworth, W. B., assignor.)					
143, 830	McLanahan, J. K., Hollidaysburgh, Pa. Lubricating pulley.....	Oct. 21, 1873	417	139	4	432
	McLane, D. W. (See Israel & McLane.)					
141, 575	McLaughlin, T. G., Glen Riddle, Pa. Bobbin.....	Aug. 5, 1873	142	46	4	147
138, 173	McLaughlin, W., Lee, Mass. Suction-apparatus for paper-machine.....	Apr. 22, 1873	821	261	3	457
137, 558	McLean, J., Meadville, Pa. Harness-buckle.....	Apr. 8, 1873	261	80	3	389
	McLean, J. N. (See Bennor, J., assignor.)					
135, 000	McLean, J. N., and J. Bennor, Philadelphia, Pa. Sewing-machine.....	Jan. 21, 1873	473	152	3	73
142, 114	Same..... Brick-machine.....	Aug. 26, 1873	664	219	4	216
143, 088	McLean, J. P., Brooklyn, N. Y. Book and paper clamp.....	Sept. 23, 1873	677	233	4	329
142, 802	McLean, O. R., New Orleans, La. Cotton-bale tie.....	Sept. 16, 1873	435	147	4	299
140, 291	McLendon, E. W., Griffin, Ga. Hoe.....	June 24, 1873	786	249	3	704
135, 654	McLennan, J. K., Elmira, Ill. Gang-plow.....	Feb. 11, 1873	253	80	3	159
	McLeod, C. A. (See Bussey, E., assignor.)					
	McLurd, R. L. (See Shipp, Peterson & McLurd.)					
134, 759	McLure, J. B., Wheeling, W. Va. Sewing-machine table.....	Jan. 14, 1873	248	81	3	40
136, 746	McMahon, H. J., Philadelphia, Pa. Combined globe-valve and trap.....	Mar. 11, 1873	357	118	3	283
141, 064	McMahon, J., Ann Arbor, Mich. Clothes-reel.....	July 22, 1873	664	223	4	91
135, 996	McMahon, P. J., New Orleans, La. Steam-generator.....	Feb. 18, 1873	561	185	3	197
143, 367	McMaster, A. D., assignor of one-half interest to I. Smith, Rochester, N. Y. Wrench.....	Sept. 30, 1873	922	313	4	365
	McMaster, J., et al. (See Foglesong, W., assignor.)					
144, 279	McMaster, J., Dayton, Ohio. Cooking-stove.....	Nov. 4, 1873	92	30	4	485
141, 576	McMillan, A., Cincinnati, Ohio. Hemmer for sewing-machines.....	Aug. 5, 1873	143	46	4	147
141, 804	McMillan, D., Osage, Iowa. Line-loop.....	Aug. 12, 1873	362	119	4	172
142, 115	McMillan, E. G., Berlin, Ohio. Horse-power.....	Aug. 26, 1873	667	219	4	216
142, 490	McMillan, J. B., North Vernon, Ind. Harvester-rake.....	Sept. 2, 1873	154	50	4	254
	McMillan, S. D., trustee. (See Karcheski, X., assignor.)					
	McMillan, W. H. (See Tasher & McMillan.)					
146, 086	McMillen, D. J., Chillicothe, Mo. Water-elevator.....	Dec. 30, 1873	964	311	4	710
143, 523	McMillen, W. T., Cincinnati, Ohio. Carbureter.....	Oct. 7, 1873	105	37	4	389
	McMiller, J., executor. (See Fritz, G.)					
137, 311	McMullen, J., Brooklyn, N. Y. Fabric for dress-protectors, &c.....	Apr. 1, 1873	29	9	3	359
137, 378	McMullen, R., Titusville, Pa. Drill-jar.....	Apr. 1, 1873	88	29	3	364
135, 351	McMullin, J., Casey, Iowa. Plow for unloading cars.....	Jan. 28, 1873	801	259	3	112
	McMurphy, C. C. (See Aston and McMurphy.)					
	McMurray, L. (See Hollingsworth, R. J., assignor.)					
139, 595	McMurray, L., Baltimore, Md. Process for preserving corn.....	June 3, 1873	130		3	619
135, 352	McMurray, O. E., Lansingburgh, N. Y. Combined stop and check valves.....	Jan. 28, 1873	801	259	3	112
5, 457	McMurtry, J., Fayette County, Ky., assignor by mesne assignments to F. Cook, New Orleans, La. Cotton-bale tie..... (Reissue)	June 17, 1873	626	196	3	683
5, 617	McMurtry, J., Lexington, Ky., assignor to F. Cook. Cotton-bale tie..... (Reissue)	Oct. 21, 1873	522	175	4	441
142, 803	McMurtry, J., Lexington, Ky. Bale-tie.....	Sept. 16, 1873	435	147	4	299
141, 577	McNabb, J. A., Olathe, Kans. Door-check.....	Aug. 5, 1873	144	46	4	147
6, 486	McNair, D., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet. (Design).....	Mar. 4, 1873			3	245
6, 936	Same..... same..... (Design).....	Oct. 7, 1873			4	380
6, 937	Same..... same..... (Design).....	Oct. 7, 1873			4	380
	McNair, W. W. (See Nilson, N., assignor.)					
136, 928	McNalley, M., Houston, Tex. Wheel for vehicles.....	Mar. 18, 1873	520	172	3	305
	McNally, F. F. (See McNally, J. T. & F. T.)					
134, 607	McNally, J. T., Brooklyn, and F. T. McNally, East New York, N. Y. Washboard.....	Jan. 7, 1873	103	33	3	15
137, 228	McNally, J. T., Brooklyn, N. Y. Bran-duster.....	Mar. 25, 1873	798	263	3	338
	McNamar, J. H. (See Scheidler & McNamar.)					
135, 138	McNamara, M., Philadelphia, Pa. Folding cradle or crib.....	Jan. 21, 1873	590	192	3	82
137, 943	McNamee, J., assignor to self and E. W. Cloud, Philadelphia, Pa. Window frame and sash.....	Apr. 15, 1873	603	190	3	430
135, 571	McNeal, C. E., Silver Creek, N. Y. Middlings-purifier.....	Feb. 4, 1873	164	53	3	140
	McNeal, S. D., et al. (See Green, C., assignor.)					
143, 022	McNeely, J., Pittsburgh, Pa. Nail-plate feeder.....	Sept. 23, 1873	624	212	4	325
140, 838	McNeil, O., and P. W. Dalton, Jersey City, N. J. Apparatus for scraping hogs.....	July 15, 1873	441	150	4	63
139, 724	McNeil, T. E., New York, N. Y. Sectional steam-boiler.....	June 10, 1873	267	84	3	646
142, 034	McNeile, A., London, England. Spoke-machine.....	Aug. 19, 1873	574	{ 189 } { 190 }	{ 4 }	199

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 803	McNeill, H. (See Straszer, G., assignor.)					
138, 673	McNeill, J., Wells, Minn. Device for detaching horses from vehicles	June 10, 1873	341	106	3	652
	McNeill, T. E., New York, N. Y. Apparatus for feeding and returning water of condensation to steam-boilers	May 6, 1873	184	59	3	512
139, 908	McNeill, T. E., and R. N. Pratt, New York, N. Y. Feed-water heater and condenser	June 17, 1873	443	138	3	667
141, 578	Same..... Steam-generator	Aug. 5, 1873	144	46	4	147
139, 173	McNeir, A. S., and W. D. Stockton, Philadelphia, Pa. Vegetable-grater	May 20, 1873	650	203	3	573
	McNitt, M. (See Ballagh, A. H., assignor.)					
138, 174	McPherson, W., Manchester, N. H. Artesian-well boring	Apr. 22, 1873	822	261	3	457
137, 016	McPherson, W. H., assignor to W. A. T. Godfroy and D. Bennett, Nashville, Tenn. Burglar-alarm	Mar. 18, 1873	597	198	3	312
	McQuiston, T., Morning Sun, Ohio. Cultivator..... (Extension)	Oct. 18, 1873			4	400
	McSherry, J. F. (See Rand & McSherry.)					
141, 369	McVicar, M., Potsdam, N. Y. Apparatus for teaching in schools	July 29, 1873	969	315	4	122
5, 337	McWhorter, F. S., Saint George's, Del. Grain-weighing machine..... (Reissue)	Mar. 25, 1873	848	278	3	342
140, 292	McWilliams, A. S., Colusa, Cal. Sheep-shears	June 24, 1873	787	250	3	704
143, 023	McWilliams, J., Providence, R. I. Jewelers' hand-press	Sept. 23, 1873	625	212	4	325
6, 366	Meacham, G. F., Newton, assignor to J. W. Tufts, Medford, Mass. Casing for soda-water apparatus..... (Design)	Jan. 21, 1873			3	71
6, 367	Same..... same..... (Design)	Jan. 21, 1873			3	71
6, 690	Same..... same..... (Design)	May 27, 1873			3	586
7, 063	Same..... same..... (Design)	Dec. 16, 1873			4	641
140, 153	Mead, E. B., Pittsfield, Mass. Cigar	June 24, 1873	672	211	3	694
142, 035	Mead, I. S., Blue Earth City, Minn. Water-heater	Aug. 19, 1873	577	190	4	199
140, 785	Mead, J. H., New York, N. Y. Lemon-squeezer	July 15, 1873	395	135	4	60
144, 406	Mead, T. H., assignor to R. Hoe & Co., New York, N. Y. Miter-box for cutting printers' rules	Nov. 11, 1873	205	69	3	507
139, 014	Meaker, J. W., Detroit, Mich. Elevator-hatchway protector	May 20, 1873	499	157	3	561
140, 213	Mears, H. A., Rockford, assignor to self, S. Salisbury, and B. Sanborn, Pecatonica, Ill. Agricultural boiler	June 24, 1873	721	227	3	698
142, 254	Mears, H. A., Pecatonica, Ill. Stove-pipe coupling	Aug. 26, 1873	781	258	4	225
145, 517	Mears, H. A., Rockford, Ill. Agricultural boiler	Dec. 16, 1873	441	144	4	645
141, 370	Mears, J. H., Oshkosh, Wis., assignor of one-half interest to W. G. and W. Barnes, Freeport, Ill. Horse hay-rake	July 29, 1873	969	315	4	122
140, 214	Mears, W., and H. Davies, Newport, Ky. Lamp-chimney support	June 24, 1873	722	227	3	698
136, 747	Meckert, A., Guttenberg, N. J. Stone pavement	Mar. 11, 1873	358	118	3	283
142, 927	Medbery, Stevens & Co. (See Dedrick, J. H., assignor.)					
142, 927	Medcalf, W. C., Rochester, N. Y. Lawn-seat	Sept. 16, 1873	536	183	4	308
136, 331	Meddows, I. O., Bonham, Tex. Running-gear for vehicles	Feb. 25, 1873	866	279	3	233
140, 154	Same..... Running-gear for wagons	June 24, 1873	672	211	3	694
	Medenwald, A. F. (See Von Kessler & Medenwald.)					
	Meehan, J. (See Lunkenheimer & Meehan.)					
	Same..... same..... (Design.)					
137, 379	Meehan, J. C., Springfield, Mass. Fire-extinguisher	Apr. 1, 1873	89	29	3	364
	Meehl, J. (See Richards & Meehl.)					
141, 157	Meek, P. G. (See Moore, J. W., assignor.)					
141, 157	Meek, W., Anderson, Ind. Potters' lathe	July 22, 1873	751	247	4	97
142, 804	Meeker, E., Bridgeport, Conn. Die for forming carriage-clips	Sept. 16, 1873	436	147	4	299
137, 706	Mefford, D. M., Norwalk, Ohio. Machine for grinding saws	Apr. 8, 1873	389	120 } 121 }	3	400
146, 012	Mége, H., Paris, France. Treating animal fats	Dec. 30, 1873	902		4	705
143, 293	Mégy, L., J. De Echeverria and F. Bazan, Paris, France. Internal spring coupling and brake	Sept. 30, 1873	850	292	4	360
	Mehaffey, S. (See Marcar & Mehaffey.)					
141, 579	Méhu, A., Paris, France. Metallic rope clamp	Aug. 5, 1873	145	47	4	147
136, 445	Meidinger, H., Karlsruhe, Germany. Apparatus for cooling liquids, &c	Mar. 4, 1873	79	27	3	252
137, 855	Meidinger, H., Karlsruhe, Germany, assignor to F. Gutzkow, San Francisco, Cal. Coal-stove	Apr. 15, 1873	531	165	3	424
140, 521	Meier, G. H., Cincinnati, Ohio. Device for releasing horses from carts	July 1, 1873	153	52	4	21
	Meier, H. (See Mueller & Meier.)					
139, 909	Meigs, G. W., Hartford, Conn. Temple for spectacles	June 17, 1873	444	138	3	667
5, 433	Meigs, J. V., Lowell, Mass. Breech-loading fire-arm..... (Reissue)	June 3, 1873	179	59	3	623
139, 408	Same..... Bracket for shelving	May 27, 1873	872	279	3	599
	Meikle, J. W. (See Meikle, T. and J. W.)					
142, 713	Meikle, T. and J. W., Louisville, Ky. Car-coupling	Sept. 9, 1873	347	117	4	282
138, 424	Meiners, C., Indianapolis, Ind. Mechanical movement	Apr. 29, 1873	1,075	339	3	486
	Meir, M. (See Conrad, E. E., assignor.)					
140, 937	Meisse, J., New Albany, Ind. Stone and glass polishing machine	July 15, 1873	538	149	4	71
140, 215	Meldrum, J. B., assignor to the Barbour Flax-spinning Company, Paterson, N. J. Evener for thread	June 24, 1873	723	227	3	699
137, 229	Mellen, P. W., Saint Louis, Mo. Reversing-valves for steam-engines	Mar. 25, 1873	799	263	3	338
137, 464	Same..... Elevator	Apr. 1, 1873	165	52, 53	3	370
140, 786	Same..... Hoisting-machine	July 15, 1873	395	135	4	60
134, 692	Mellinger, C. K., Lebanon, Pa., assignor to self and J. Reineohl, jr., Harrisburgh, Pa. Carriage-seat	Jan. 7, 1873	182	60	3	21
143, 024	Mellish, H., Walpole, N. H. Clothes-pin	Sept. 23, 1873	626	213	4	325
140, 938	Melloe, C. H., and M. L. Orum, Philadelphia, Pa. Rotary-cutter	July 15, 1873	539	179	4	71
140, 727	Melone, T. L., Mount Gilead, Ohio. Sewing-machine..... (Extension)	July 15, 1873	396	136	4	60
	Melton, R. M., Criglersville, Va. Cultivator..... (Reissue)	May 31, 1873			3	585
	Melville, M. L. (See Kidd & Melville.)					
	Melvin, J. B., et al. (See Hobart, G. W., assignor.)					
	Mendenhall, E., et al. (See Getty, G. B., assignor.)					
144, 467	Mendenhall, N. M., Dublin, Ind. Traction-engine	Nov. 11, 1873	255	86	4	511
	Mendham, W. (See Chambers & Mendham.)					
143, 294	Mendham, W., assignor to self and W. P. Davis, Philadelphia, Pa. Ball-valve	Sept. 30, 1873	854	292	4	360
	Menegay, J. (See Laurent & Menegay.)					
	Merchant, A. P., administratrix. (See Merchant, N. R., assignor)..... (Reissue.)					
	Merchant, M., administrator. (See Merchant, N. R.)..... (Reissue.)					
5, 222	Merchant, N. R., deceased, assignor of part interest to A. P. Merchant, said A. P. and M. Merchant, administrators, Guilford, N. Y. Boring-machine..... (Reissue)	Jan. 7, 1873	212	68	3	23
139, 967	Merchen, J., Broosville, Ind. Animal trap	June 17, 1873	487	154	3	671
145, 518	Mercier, E., Springfield, Mass. Railway-switch	Dec. 16, 1873	442	144	4	645
	Meriden Britannia Company. (See Wilcox, H. C., assignor)..... (Design.)					
137, 144	Mern, J. P., New York, N. Y. Stop-cock	Mar. 25, 1873	719	239	3	332
138, 512	Merrell, E. A., East Lyme, Conn. Insulator for telegraph-lines	May 6, 1873	41	14	3	501

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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7, 081	Merriam, A., and C. L. Little, West Meriden, Conn. Pin-cushion (Design)	Dec. 30, 1873			4	698
141, 285	Merriam, F. M. and J. B., West Meriden, Conn. Attaching knobs to spindles	July 29, 1873	885	290	4	116
145, 673	Merriam, G. H., Portland, Me. Automatic attachment for car-couplings	Dec. 16, 1873	573	188	4	656
	Merriam, J. B. (See Merriam, F. M. & J. B.)					
	Merriam, J. O. (See Chamberlin, E., assignor) (Reissue.)					
	Same (See Morehouse, C. B., assignor) (Reissue.)					
	Merriam, J. O., et al. (See Morehouse, C. B., assignor) (Reissue.)					
137, 312	Merriam, L. W., Fitchburgh, Mass. Shingling-bracket	Apr. 1, 1873	30	9	3	359
138, 425	Same same	Apr. 29, 1873	1, 075	339	3	486
	Merriam Manufacturing Company. (See Harwood, W. A., assignor) (Design.)					
	Same (See Hubbard & Severance, assignors.)					
142, 406	Merrick, D. E., assignor of one-half interest to J. B. Smith, Milwaukee, Wis. Joint for iron ships and tanks	Sept. 2, 1873	76	25	4	248
	Merrick, T. (See Church, D. M., assignor.)					
	Merrihew, P. E. (See Ladd, D. O. B., assignor.)					
138, 911	Merriken, J. S., Baltimore, Md. Bricklayer's pointer	May 13, 1873	401	126	3	540
	Merrill, C. J. (See Vaughn, Camp & Merrill.)					
142, 576	Merrill, C. J., Upper Alton, Ill. Tile-machine	Sept. 9, 1873	236	77	4	273
	Merrill, E. P. (See Boody & Merrill.)					
	Merrill, F. C. (See Pettengill, C. B., assignor.)					
139, 174	Merrill, F. H., San Francisco, Cal. Pipe-tongs	May 20, 1873	650	203	3	573
134, 761	Merrill, G., East Orange, N. J. Fastening for shoes, &c.	Jan. 14, 1873	250	82	3	40
140, 635	Same Knitting-machine	July 8, 1873	265	90	4	41
145, 581	Merrill, G. L. and O. F. Soule, Syracuse, N. Y. Preserving green corn and other vegetables	Dec. 16, 1873	495	162	4	649
138, 036	Merrill, H., Brooklyn, N. Y. Car-wheel	Apr. 22, 1873	706	223	3	448
138, 175	Same Grain-elevator	Apr. 22, 1873	823	261	3	458
	Merrill, H. E. (See Vaughn, Camp & Merrill.)					
141, 230	Merrill, H. E., Akron, Ohio. Machine for molding clay smoking-pipes	July 29, 1873	834	{ 272 } { 273 }	{ 4 }	112
	Merrill, H. S. (See Annan, C. F., assignor.)					
137, 786	Merrill, I., Springfield, Mass. Hook attachments to bands of fire-arms	Apr. 15, 1873	472	148	3	419
	Merrill, J., et al. (See Merrill, R. S., assignor.)					
143, 524	Merrill, J. A. and D. W. Kempton, Denver, Colorado Ter. Car-coupling	Oct. 7, 1873	106	37	4	389
140, 585	Merrill, W. M., Boston, Mass. Abdominal supporter	July 8, 1873	223	75	4	38
143, 525	Merrill, P. H., Pardeeville, Wis. Steam-heater	Oct. 7, 1873	108	37	4	389
145, 438	Merrill, R. S., Hyde Park, assignor to self and W. B. & J. Merrill, Boston, Mass. Lamp-burner	Dec. 9, 1873	356	119	4	626
145, 068	Merrill, T., Portland, Me. Combined ruler and blotter	Dec. 2, 1873	26	9	4	587
	Merrill, W. B., et al. (See Merrill, R. S., assignor.)					
	Merriman, A. T., Chicago, Ill. Machine for sawing stone (Extension)	June 21, 1873	.....	.....	3	662
139, 409	Same Machine for planing stone	May 27, 1873	872	279	3	599
	Merriman, C. H., trustee. (See Vanstone, S., assignor.)					
134, 760	Merriman, M. H. (See Huffer, A., assignor.)					
	Merritt, B., Newton, Mass. Jig-saw	Jan. 14, 1873	249	81, 82	3	40
	Merritt, D. (See Coe & Merritt.)					
	Merritt, E., et al. (See Kimball, E. A., assignor.)					
139, 410	Merritt, I., assignor to self and W. A. Sweetser, North Bridgewater, Mass. Fire-escape	May 27, 1873	873	280	3	599
140, 061	Merritt, J. C., West Point, N. Y., assignor to self and J. J. Walton, Newark, N. J. Shoulder-strap	June 17, 1873	572	181	3	678
142, 036	Merritt, J. E., Bangor, Me. Saw-hanging	Aug. 19, 1873	578	190	4	199
143, 773	Merritt, W., Weymouth, Mass. Lumber-marker	Oct. 21, 1873	367	121	4	428
	Merritt, W. L. (See Hastings, Nichols & Merritt.)					
	Merry, C. T. (See Moshier, W., assignor.)					
6, 709	Mersereau, J., Port Chester, N. Y. Flower-vase (Design)	June 17, 1873	.....	.....	3	663
6, 615	Mersereau, W. T., Orange, N. J. Stair-rod (Design)	Apr. 29, 1873	.....	.....	3	471
5, 278	Mershon, A. H., Philadelphia, Pa., assignor to self and G. B. Mershon. Gas fire-log	Feb. 11, 1873	451	147	3	174
	Mershon, G. B. (See Mershon, A. H., assignor) (Reissue.)					
	Mertsheimer, F. (See McConnell, Truesdell & Mertsheimer.)					
	Mertz, E. (See Maring & Mertz.)					
136, 379	Mervesp, J. J., New York, N. Y. Calk for horseshoes	Mar. 4, 1873	25	8	3	247
	Merz, H. (See Arnold & Merz.)					
	Mesick, P. (See Barnes, W. F. & J., and Mesick.)					
142, 805	Messer, J. L., Troy, N. Y. Lime-kiln	Sept. 16, 1873	436	147	4	299
	Messer, W. W., jr. (See Fairfield & Messer.)					
137, 465	Messer, W. W., jr., Boston, Mass., assignor to W. W. Messer, Northwood, N. H. Buffing-machine	Apr. 1, 1873	167	53	3	370
141, 009	Messinger, R. G., Norwich, Conn. Toy	July 22, 1873	617	208	4	87
	Metallic Suspension-Wheel Company. (See Vreeland, S., assignor.)					
	Same same (Reissue.)					
134, 915	Metcalf, A., and W. Gibbons, Preston, Great Britain. Self-acting spinning-mule	Jan. 14, 1873	386	123	3	51
141, 286	Metcalf, E., Rome, N. Y. Inside blind	July 29, 1873	885	290	4	116
152, 256	Metcalf, G., Somonauk, Ill. Windmill	Aug. 26, 1873	783	258	4	225
137, 787	Metcalf, O., Mitchell, assignor to J. Harlan, Lexington, Ind. Fruit-press	Apr. 15, 1873	472	148	3	420
143, 415	Metcalfe, H., United States Army. Means of attaching cartridge-magazine blocks to fire-arms	Oct. 7, 1873	19	8	4	382
	Metropolitan Washing-Machine Company. (See Page, A. H., assignor) (Reissue.)					
	Same (See Pool, T., assignor) (Reissue.)					
142, 928	Metsker, J. G., Logansport, Ind. Bake-pan	Sept. 16, 1873	536	183	4	308
134, 693	Mettals, C. J., assignor to G. Sackett, New York, N. Y. Coloring pictures	Jan. 7, 1873	183	.....	3	21
140, 839	Mettler, I. S., Jersey City, N. J. Fire-proof shutter	July 15, 1873	442	150	4	63
142, 641	Same Metallic roof	Sept. 9, 1873	287	94	4	277
135, 353	Metz, J. W., Stout's P. O., Ohio. Brick-machine	Jan. 28, 1873	802	259	3	112
	Metzger, J. C. (See Bladon, T., assignor.)					
	Meucci, A. (See Agresta & Meucci.)					
140, 719	Meunier, L. F., Fires-Lille, France. Heater and filter	July 8, 1873	335	113	4	47
143, 707	Newborn, L. J., Kinston, N. C. Potato cutter and planter	Oct. 14, 1873	291	95	4	412
139, 015	Mewes, H., Binghamton, N. Y. Fruit-picker	May 20, 1873	500	158	3	562
6, 270	Meyenberg, S. M. and R. Collinge, Paterson, N. J. Veil (Design)	Sept. 2, 1873	.....	.....	4	241
6, 431	Meyer, C. T. & V. E., Lyons Farms, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth	Feb. 18, 1873	.....	.....	3	189
	Same same (Design)	Feb. 18, 1873	.....	.....	3	189
6, 432	Same same (Design)	Feb. 18, 1873	.....	.....	3	189
6, 433	Same same (Design)	Feb. 18, 1873			3	189
6, 434	Same same (Design)	Feb. 18, 1873			3	189

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6, 435	Meyer, C. T. & V. E., Lyons Farms, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth..... (Design) ..	Feb. 18, 1873			3	189
6, 436	Same..... (Design) ..	Feb. 18, 1873			3	189
6, 494	Same..... Floor oil-cloth..... (Design) ..	Mar. 18, 1873			3	297
6, 495	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 496	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 497	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 498	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 499	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 500	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 501	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 502	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 503	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 504	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 505	Same..... same..... (Design) ..	Mar. 18, 1873			3	297
6, 526	Same..... Floor oil-cloth, &c..... (Design) ..	Mar. 25, 1873			3	325
6, 527	Same..... same..... (Design) ..	Mar. 25, 1873			3	325
6, 546	Same..... same..... (Design) ..	Apr. 1, 1873			3	357
6, 547	Same..... same..... (Design) ..	Apr. 1, 1873			3	357
6, 656	Same..... Floor-cloth..... (Design) ..	May 20, 1873			3	559
6, 657	Same..... same..... (Design) ..	May 20, 1873			3	559
6, 661	Same..... same..... (Design) ..	May 20, 1873			3	559
6, 662	Same..... same..... (Design) ..	May 20, 1873			3	559
6, 663	Same..... same..... (Design) ..	May 20, 1873			3	585
6, 786	Same..... Oil-cloth..... (Design) ..	July 29, 1873			4	108
6, 787	Same..... same..... (Design) ..	July 29, 1873			4	108
6, 788	Same..... same..... (Design) ..	July 29, 1873			4	108
6, 789	Same..... same..... (Design) ..	July 29, 1873			4	108
6, 871	Meyer, C. T. & V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth..... (Design) ..	Sept. 2, 1873			4	242
6, 885	Same..... (Design) ..	Sept. 16, 1873			4	296
6, 951	Same..... Floor oil-cloth..... (Design) ..	Oct. 7, 1873			4	380
6, 980	Meyer, C. T. & V. E., Bergen, N. J., assignors to E. C. Sampson, Philadelphia, Pa. Floor oil-cloth..... (Design) ..	Nov. 4, 1873			4	478
6, 981	Same..... (Design) ..	Nov. 4, 1873			4	478
6, 998	Meyer, C. T. & V. E., Bergen, N. J., assignor to E. C. Sampson, New York, N. Y. Oil-cloth..... (Design) ..	Nov. 18, 1873			4	531
6, 999	Same..... same..... (Design) ..	Nov. 18, 1873			4	531
7, 000	Same..... same..... (Design) ..	Nov. 18, 1873			4	531
7, 001	Same..... same..... (Design) ..	Nov. 18, 1873			4	531
7, 035	Same..... Floor oil-cloth and carpet..... (Design) ..	Dec. 9, 1873			4	614
7, 036	Same..... same..... (Design) ..	Dec. 9, 1873			4	614
7, 037	Same..... same..... (Design) ..	Dec. 9, 1873			4	614
145, 960	Meyer, F., assignor to D. M. Osborne & Co., Auburn, N. Y. Apparatus for tempering sickle-sections.....	Dec. 30, 1873	856	278	4	701
137, 856	Meyer, G., New Richmond, Mich. Motive-power.....	Apr. 15, 1873	532	166	3	424
135, 139	Meyer, G., assignor of one-half interest to J. Dick, Quincy, Ill. Machines for pitching barrels, casks, &c.....	Jan. 21, 1873	591	192	3	83
141, 449	Meyer, G., and J. Dick, Quincy, Ill. Apparatus for pitching casks, barrels, &c.....	Aug. 5, 1873	35	11	4	138
139, 411	Meyer, G. F. (See Lassoe, V. F., assignor.)					
142, 491	Meyer, H. H., Denver, Col. Drawing-board.....	May 27, 1873	874	280	3	599
6, 691	Same..... Governor cut-off gear.....	Sept. 2, 1873	155	50	4	254
145, 674	Meyer, J., assignor to D. Powers & Sons, Lansingburgh, N. Y. Floor-cloth..... (Design) ..	May 27, 1873			3	586
6, 382	Meyer, L., Saint Louis, Mo. Range.....	Dec. 16, 1873	574	188	4	656
141, 580	Meyer, P. P., New York, N. Y. Urn for hot water, &c..... (Design) ..	Feb. 4, 1873			3	127
141, 581	Meyer, V. E. (See Meyer, C. T. & V. E.)					
135, 001	Meyers, L., assignor to self and J. Adler, New York, N. Y. Glove-fastener.....	Aug. 5, 1873	145	47	4	147
136, 446	Meyersberg, A., New York, N. Y., assignor to E. B. Finch & Son, Peekskill, N. Y. Match-box.....	Aug. 5, 1873	146	47	4	147
137, 615	Meylert, A. P., New Britain, Conn. Method of purifying carbonic-acid gas.....	Jan. 21, 1873	476		3	73
140, 522	Same..... Process for the manufacture of white-lead.....	Mar. 4, 1873	80	27	3	252
135, 239	Same..... Process of purifying carbonic-acid gas.....	Apr. 8, 1873	308		3	393
136, 849	Michael, A. F., and H. N. Duncan, Lockport, N. Y. Carpet-stretcher.....	July 1, 1873	154	52	4	21
138, 674	Michaels, J. P., and L. W. Broadwell, assignors to selves and P. S. Post, Vienna, Austria. Railway-car heater.....	Jan. 28, 1873	702	225	3	104
138, 426	Michaels, L., Covington, Ky. Lamp.....	Mar. 18, 1873	455	151	3	300
143, 174	Same..... Locomotive head-light.....	Apr. 29, 1873	1,076	339	3	486
136, 380	Same..... Attaching knobs to latches.....	Sept. 23, 1873	742	255	4	335
143, 025	Michaux, H., Hockanum, Conn. Mowing-machine.....	Mar. 4, 1873	26	9	3	247
138, 675	Michaux, H., Hockanum, Conn. Mowing-machine.....	Sept. 23, 1873	626	213	4	325
142, 492	Michener, E. P. (See Powell, J. B., assignor.)					
135, 929	Michener, W. R., et al. (See Milroy, J. W., assignor.)					
143, 989	Michtle, C. C. (See Pavonarius & Michtle.)					
138, 674	Mickel, W. (See Hoagland & Mickel.)					
138, 675	Mickels, F., assignor of one-half interest to H. A. Grimmer, Quincy, Ill. Sausage-stuffer.....	May 6, 1873	185	59	3	512
142, 492	Mickley, J. W. (See Thomas S., assignor.)					
135, 929	Middleton, A., jr. (See Clime, J. C., assignor.)					
143, 989	Same..... (See Middleton, N. & A., jr.)					
138, 675	Middleton, A., jr., Philadelphia, Pa. Car-spring.....	May 6, 1873	186	59	3	512
142, 492	Same..... Car-coupling.....	Sept. 2, 1873	156	51	4	254
135, 929	Middleton, E. C. (See Winchell, J. F., assignor.)					
143, 989	Middleton, N. & A., jr., Philadelphia, Pa. Manufacture of car-springs.....	Feb. 18, 1873	506	165	3	193
138, 674	Middleton, S., assignor to self and J. Troop, Dunkirk, Ind. Feeding-device for grinding-mills.....	Oct. 28, 1873	572	190	4	455
138, 674	Mignon, J. B. J., et al. (See Carré, F. P. E., assignor.)					
138, 674	Same..... (See Gauduin, Mignon & Rouart.)					
138, 674	Milbank, C. (See Haberstick, P., assignor.)					
138, 674	Milbank, I. M., Greenfield Hill, Conn. Metallic cartridge.....	Feb. 25, 1873	729	235	3	222
138, 674	Same..... Breech-loading fire-arm.....	Mar. 18, 1873	456	151	3	300
138, 674	Milbourn, J., Millport, Ohio. Horse-power.....	June 10, 1873	270	84	3	647
138, 674	Miles Alarm-Till Manufacturing Company. (See Baldwin, J. F., assignor.)					
138, 674	Miles, F. B., et al. (See Hahn, F. E., assignor.)					
138, 674	Miles, F. B., assignor to Ferris & Miles. Philadelphia, Pa. Steam drop-hammer.....	Apr. 1, 1873	30	10	3	359
138, 674	Miles, F. B., assignor to self and O. C. Ferris, Philadelphia, Pa. Planing-machine.....	Sept. 2, 1873	157	51	4	254
138, 674	Miles, F. B., assignor to O. C. Ferris and F. B. Miles, Philadelphia, Pa. Automatically-operating shaft.....	Sept. 2, 1873	158	51	4	254

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135, 043	Miles, H. R. (See Wright, Holley & Miles.)					
	Miles, J. A., Charleston, Ill. Inking-pad.....	Jan. 21, 1873	514	166	3	76
	Miles, O. E. (See Marsh & Miles.)					
144, 553	Miles, W. H., jr., Brooklyn, N. Y. Lather-brush handle.....	Nov. 11, 1873	330	111	4	516
143, 921	Millar, H. M., Louisville, Ky. Bosom-pad.....	Oct. 21, 1873	491	165	4	438
	Millar, J. S. (See McDougall, A., assignor)..... (Reissue.)					
138, 912	Millard, H., Philadelphia, Pa. Car-coupling.....	May 13, 1873	402	127	3	540
136, 929	Millegan, W. E., McKinney, Tex. Washing-machine.....	Mar. 18, 1873	521	172	3	305
139, 175	Miller, A., New York, N. Y., assignor to G. T. Nutter, Jersey City, N. J. Elevating lad- ders.....	May 20, 1873	651	203	3	574
	Miller, A. A. (See Manson, G. W., assignor.)					
142, 714	Miller, A. S., Nottingham, Ind. Clothes-drier.....	Sept. 9, 1873	348	117	4	282
	Miller Brothers. (See Miller, J. N., assignor.)					
137, 145	Miller, B. & M., Lowell, Wis. Sieve for separators.....	Mar. 25, 1873	720	239	3	332
142, 037	Miller, C. G., assignor to O. S. Judd and C. Blakeslee, New Britain, Conn. Match-plane..	Aug. 19, 1873	579	190	4	199
142, 715	Miller, C. L., Cuba, N. Y. Car-coupling.....	Sept. 9, 1873	348	118	4	282
	Miller, C. M., et al. (See Spencer, J. C., assignor.)					
141, 656	Miller, C. M., Phelps, N. Y. Vertical steam-boiler.....	Aug. 12, 1873	232	73	4	162
143, 831	Miller, D. K., Philadelphia, Pa. Seal-lock, &c.....	Oct. 21, 1873	418	139	4	432
143, 990	Same..... Padlock, &c.....	Oct. 28, 1873	572	190	4	455
143, 368	Miller, D. M., South Bend, Ind. Car-coupling.....	Sept. 30, 1873	923	313	4	366
139, 726	Miller, D. Y., Huntsville, Ill. Scaffold.....	June 10, 1873	270	85	3	647
	Miller, E., et al. (See Ambrose, J. E., assignor)..... (Reissue.)					
	Miller, E., & Co. (See Perkins, O. N., assignor.)					
	Same..... (See Perkins, W. H., assignor.)..... (Design.)					
135, 572	Miller, F. C., assignor to self and H. C. Peters, Cincinnati, Ohio. Cigar-mold.....	Feb. 4, 1873	165	53	3	140
142, 170	Miller, F. C., Blue Earth City, Minn. Seed-separator.....	Aug. 26, 1873	710	235	4	219
	Miller, F. E., et al. (See Durini, A., assignor.)					
145, 439	Miller, F. L., Brooklyn, N. Y. Paint-can and device for removing the contents.....	Dec. 9, 1873	357	119	4	626
	Miller, G., et al. (See Miller, H., assignor)					
143, 295	Miller, G., Battle Ground, Wash. Bee-hive.....	Sept. 30, 1873	854	293	4	369
144, 468	Miller, G. C., Detroit, Mich., assignor to J. C. Maloy, Oil City, Pa. Extension-dividers.....	Nov. 11, 1873	257	86	4	511
140, 523	Miller, G. H., Leavenworth, Kans. Hot-air furnace.....	July 1, 1873	154	53	4	21
142, 642	Miller, G. H., Binghamton, N. Y. Centering-chuck.....	Sept. 9, 1873	288	94	4	277
	Miller, G. W., et al. (See Anderson, J. J., assignor.)					
	Miller, G. W. (See Smith, G. K., assignor.)					
	Miller, H. (See Hewet, H. W., assignor.)					
	Same..... (See Miller, S., assignor.)					
136, 085	Miller, H., New York, N. Y. Can for paint, liquids, &c.....	Feb. 18, 1873	639	209	3	203
145, 069	Miller, H., assignor to G. and H. Miller and A. A. Irons, Johnston, R. I. Sink.....	Dec. 2, 1873	27	9	4	587
145, 440	Miller, H., New York, N. Y. Can for paint, &c.....	Dec. 9, 1873	358	120	4	626
139, 513	Miller, H. H., and T. Bennett, Saint Louis, Mo. Card-case.....	June 3, 1873	60	20	3	613
	Miller, H. P. (See Miller, J. A., assignor.)					
139, 176	Miller, H. S., Philadelphia, Pa. Rotary paper-cutter.....	May 20, 1873	653	204	3	574
	Miller, J. (See Miller, L. & J.)..... (Extension.)					
	Miller, J. (See Ponce, J. P., assignor.)					
137, 944	Miller, J., New York, N. Y. Apparatus for heating cranks.....	Apr. 15, 1873	603	190	3	431
138, 176	Same..... Casting bearings on shafting.....	Apr. 22, 1873	824	262	3	458
138, 914	Miller, J., West Salem, Ohio. Wood fillings and paint compound.....	May 13, 1873	404		3	541
142, 495	Miller, J., assignor of one-half interest to C. H. Delamater, New York, N. Y. Planing- machine.....	Sept. 2, 1873	158	51, 52	4	254
135, 656	Miller, J. A., assignor of one-half interest to H. P. Miller, Paducah, Ky. Device for dis- charging bilge-water.....	Feb. 11, 1873	254	80	3	160
135, 655	Miller, J. C., and E. S. Armstrong, Sunbury, Ohio. Table.....	Feb. 11, 1873	254	80	3	160
146, 087	Miller, J. C., Rockport, Ind. Clothes-frame.....	Dec. 30, 1873	965	311	4	710
6, 506	Miller, J. E., Pittsburgh, Pa. Beer-mug..... (Design)	Mar. 18, 1873			3	297
138, 913	Miller, J. H., Frederickton, New Brunswick. Track-clearer.....	May 13, 1873	403	127	3	540
134, 916	Miller, J. M., Cincinnati, Ohio. Spring-vehicle.....	Jan. 14, 1873	388	123	3	51
141, 065	Miller, J. N., assignor to Miller Brothers, Bellefontaine, Ohio. Carriage-seat.....	July 22, 1873	665	224	4	91
	Miller, L., Akron, and J. Miller, Canton, Ohio. Harvester..... (Extension)	July 5, 1873			4	6
138, 268	Miller, L. J., Orrville, Ohio. Nut-lock.....	Apr. 29, 1873	934	295	3	475
	Miller, L. N., et al. (See Patterson, N. A., assignor.)					
	Miller, M. (See Baird & Miller.)					
	Same..... (See Miller, B. & M.)					
	Miller, M. F. (Patterson, N. A., assignor.)					
138, 094	Miller, N. C., Stroudsburg, Pa. Egg-beater.....	Apr. 22, 1873	756	240	3	452
141, 582	Miller, N. E., Canaan Center, Ohio. Cider-mill.....	Aug. 5, 1873	146	47	4	147
	Miller, P. (See Price & Miller.)					
139, 412	Miller, R. P. and W. I., Lineville Station, Pa. Fly-trap.....	May 27, 1873	875	280	3	599
135, 657	Miller, R. R., assignor to self and J. B. Savage, Southington, Conn. Martingale.....	Feb. 11, 1873	255	81	3	160
139, 413	Miller, R. R., Plantsville, Conn. Die for swaging carriage-clips.....	May 27, 1873	875	280	3	599
	Miller, S. (See Stevens & Miller.)					
140, 720	Miller, S., Holley, N. Y., assignor of one-half interest to H. Miller, Hudson, N. Y. Car- coupling.....	July 8, 1873	336	114	4	47
145, 223	Miller, S., Gratis, Ohio. Permutation-lock.....	Dec. 2, 1873	166	57	4	598
137, 707	Miller, S. E., Stanwood, Iowa. Stalk-cutter.....	Apr. 8, 1873	390	121	3	400
137, 708	Same..... Seeding-machine.....	Apr. 8, 1873	391	121	3	400
	Miller, S. H. (See Wilson & Miller.)					
142, 257	Miller, S. H., assignor to self and J. E. Folk, Brooklyn, N. Y. Signal-lantern.....	Aug. 26, 1873	784	258	4	225
144, 554	Same..... same.....	Nov. 11, 1873	331	{ 111 112 }	{ 4 3 }	{ 516 312 }
137, 017	Miller, S. J., and L. Wright, Economy, Ind. Wheel for vehicles.....	Mar. 18, 1873	598	198	3	312
144, 690	Miller, T., New York, N. Y. Fire-extinguishing water-pipe attachment for buildings.....	Nov. 18, 1873	452	153	4	538
144, 856	Miller, T., Boston, Mass. Oil-cabinet.....	Nov. 25, 1873	607	206	4	561
	Miller, T. L. (See Ross & Miller.)					
140, 586	Miller, T. L., Philadelphia, Pa. Machine for sewing turned shoes.....	July 8, 1873	224	75	4	38
139, 910	Miller, T. N., Pittsburgh, Pa. Manufacture of illuminating gas.....	June 17, 1873	445		3	667
140, 293	Miller, W., Boston, Mass., assignor to self and J. J. Hatlinger, Hyde Park, Mass. Carpet- sweeper.....	June 24, 1873	788	250	3	704
145, 582	Miller, W. A., Paterson, N. J. Book-clamp.....	Dec. 16, 1873	496	163	4	649
	Miller, W. F. (See Griffith & Miller.)					
139, 727	Miller, W. F., East Walpole, Mass. Propelling canal-boats.....	June 10, 1873	271	85	3	647
	Miller, W. I. (See Miller, R. P. and W. I.)					
	Miller, W. K. (See Batty, L. M., assignor)..... (Reissue.)					
	Miller, W. K., Canton, Ohio. Harvester..... (Extension of No. 2,266)	Feb. 8, 1873			3	100

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	Miller, W. K., Canton, Ohio. Harvester (Extension of No. 2, 267)	Feb. 8, 1873			3	100
	Same (Extension of No. 2, 268)	Feb. 8, 1873			3	100
	Same (Extension of No. 2, 269)	Feb. 8, 1873	.....	.....	3	100
	Same (Extension of No. 2, 270)	Feb. 8, 1873	.....	.....	3	100
139, 596	Same same	June 3, 1873	131	43, 44	3	619
139, 597	Same same	June 3, 1873	132	44	3	620
139, 911	Miller, W. P., New York, N. Y. Machine for grinding hay	June 17, 1873	445	138	3	667
142, 258	Same Saw-tooth	Aug. 26, 1873	784	259	4	226
	Miller's Falls Company. (See Goodell, A. D., assignor.)					
	Miller's Falls Manufacturing Company. (See Goodell, A. D., assignor.)					
	Millett, G. V. (See Austin, H. K., assignor.)					
	Milligan, N., et al. (See Gearing, C., assignor.)					
143, 455	Milliken, D., New York, N. Y. Machine for splitting wood	Oct. 7, 1873	49	17	4	385
	Millot, J. (See Millot, T. and J.)					
144, 916	Millot, T. and J., New York, N. Y. Flower-makers' grass-cutting machine	Nov. 25, 1873	651	221	4	565
	Mills, G., et al. (See Hills, H. C., assignor.)					
138, 037	Mills, G. E., New York, N. Y. Mining-pump	Apr. 22, 1873	707	223	3	448
	Mills, G. M. (See Mills, T. and G. M.)					
	Mills, H. (See Rager, C. B., assignor.)					
135, 140	Mills, J., Keeseville, N. Y. Horseshoe-nail machine	Jan. 21, 1873	592	192	3	83
135, 997	Mills, J., Johnstown, Wis. Cultivator	Feb. 18, 1873	562	185	3	197
143, 369	Mills, J. D., Alexandria, Va. Car-coupling	Sept. 30, 1873	924	313	4	366
	Mills, J. H. (See Wightman and Mills.)					
138, 269	Mills, J. H., Boston, Mass. Steam-generator	Apr. 29, 1873	935	295	3	475
145, 961	Same Indirect steam-radiator	Dec. 30, 1873	857	279	4	701
145, 962	Same System of steam and water-piping for buildings	Dec. 30, 1873	858	279	4	701
	Mills, L. (See Bean and Mills.)					
	Mills, L., et al. (See Foster, J. T., assignor.)					
138, 177	Mills, L., Jersey City, N. J. Box opener	Apr. 22, 1873	824	262	3	458
	Mills, S. (See Urdahl, T., assignor.)					
	Mills Shoe Machine and Manufacturing Company. (See Mills, W. J. B., assignor.)					
139, 804	Mills, T. and G. M., Philadelphia, Pa. Machine for granulating cocoa-nuts	June 10, 1873	343	106	3	652
144, 214	Mills, T. O., Rockford, assignor of one-half interest to W. H. Mills, Freeport, Ill. Gear-cutting attachment to lathes	Nov. 4, 1873	40	12	4	481
145, 745	Mills, W., and D. J. Wolfe, Jersey City, N. J. Toy-gun	Dec. 23, 1873	648	212	4	674
	Mills, W. H. (See Mills, T. O., assignor.)					
137, 616	Mills, W. J. B., Philadelphia, Pa., assignor to Mills Shoe Machine and Manufacturing Company, New York, N. Y. Last	Apr. 8, 1873	309	96	3	393
140, 721	Milner, E., Warrington, England. Manufacture of white lead for pigments	July 8, 1873	337	.....	4	47
135, 002	Milroy, J. W., assignor to self, W. R. Michener, and C. L. Howard, Haywood, Cal. Rotary cultivator	Jan. 21, 1873	476	152	3	73
141, 158	Millstead, A. J., Woodbury, assignor of one-half interest to W. E. Hooper & Sons, Baltimore, Md. Stopping-mechanism for twisting-machines	July 22, 1873	752	{ 247 } { 248 }	{ 4 }	{ 97 }
145, 224	Miltimore, A. E., United States Army. Battery-gun	Dec. 2, 1873	167	57	4	598
144, 347	Miltimore, G. W., Janesville, Wis. Car-axle	Nov. 4, 1873	145	48	4	490
138, 513	Milton, C. C., assignor of one-half interest to E. A. Learned, San Francisco, Cal. Fire-escape	May 6, 1873	42	14, 15	3	501
	Mindeleff, D. (See Kloczewski & Mindeleff.)					
	Miner, A. L., et al. (See Hardenbergh, Miner and Fender.)					
	Miner, G. D. (See Bayles, Carroll, and Miner.)					
145, 888	Miner, H. H., Boston, Mass. Shutter-fastening	Dec. 23, 1873	770	252	4	684
140, 062	Miner, J. G., Morrisania, N. Y. Street-lamp	June 17, 1873	573	181	3	679
	Miner, J. R., et al. (See Dorman, L., assignor.) (Reissue.)					
	Miner, T. F. (See Harris, S. W., assignor.)					
	Miner, T. F., et al. (See Harris, S. W., assignor.)					
143, 584	Miner, W. H., Boston, Mass. Calipers	Oct. 14, 1873	174	59	4	403
5, 712	Mingay, E., Boston, Mass. Design for heating-stove	Dec. 30, 1873	1, 006	.....	4	713
6, 965	Mingay, E., assignor to Boston and Maine Foundry Company, Boston, Mass. Cooking-stove	Oct. 21, 1873	.....	.....	4	425
	Minks, J. (See Sullivan & Minks.)					
135, 240	Minniss, T. S., assignor of two-thirds interest to E. W. Shippen, Meadville, Pa. Traction locomotive	Jan. 28, 1873	704	226	3	104
145, 889	Minor, D. N., Chariton, Iowa. Seed-drill	Dec. 23, 1873	771	252	4	684
145, 441	Minot, H. P., Chicago, Ill. Ore-separator	Dec. 9, 1873	359	120	4	626
5, 458	Minter, T. W., New York, N. Y. Engraving and carving machine	June 17, 1873	626	197	3	683
135, 998	Same same	Feb. 18, 1873	562	186	3	197
145, 519	Minthorn, D., Gouverneur, N. Y., assignor of three-fourths interest to D. P. Smock, New York, N. Y. Die for forming rock-drills and other tools	Dec. 16, 1873	443	145	4	645
136, 531	Mitchel, O. M., Marathon, N. Y., assignor to Nellis, A., Fort Plain, N. Y. Head-rest	Mar. 4, 1873	161	52	3	258
	Mitchell, C. A. (See Heffley, W. H., assignor.)					
	Mitchell, D. L. H. (See Hunter & Mitchell.)					
140, 063	Mitchell, D. L. H., Forest, Miss. Lifting-jack	June 17, 1873	574	181	3	679
	Mitchell, H. M., et al. (See Flanders, J. P., assignor.)					
	Mitchell, J. H., Clarksville, Tenn. Cotton-scraper	Sept. 13, 1873	.....	.....	4	270
139, 728	Mitchell, J. H., San Francisco, Cal. Cooking-range	June 10, 1873	272	85	3	647
142, 259	Same Laundry-stove	Aug. 26, 1873	785	259	4	226
141, 583	Mitchell, J. J., Livingston, Ala. Shovel-plow	Aug. 5, 1873	148	48	4	147
146, 088	Mitchell, J. J., Hopkinsville, Ky. Plow	Dec. 30, 1873	966	312	4	710
138, 676	Mitchell, J. M., Cincinnati, Ohio. Whip-rack	May 6, 1873	187	59	3	512
145, 358	Mitchell, J. M., Dunlap, Iowa. Brick-machine	Dec. 9, 1873	289	97	4	621
6, 881	Mitchell, M. V., Zanesville, Ohio. Monument	Sept. 9, 1873	.....	.....	4	270
145, 117	Mitchell, T. P., Haverhill, Mass. Boot or bootee	Dec. 2, 1873	72	23	4	591
141, 010	Mitchell, W., London, and J. J. Mayo, Sutton, England. Flash-light signal	July 22, 1873	618	209	4	87
145, 584	Mitchell, W. B., Chicago, Ill. Car-coupling	Dec. 16, 1873	498	163	4	650
135, 141	Mitcheson, E. B. A., Philadelphia, Pa. Moustache-spoon	Jan. 21, 1873	593	193	3	83
136, 169	Mittendorf, H., Stony Hill, Mo. Revolving-harrow	Feb. 25, 1873	730	235	3	222
136, 170	Mivelar, L. L., Louisville, Ky. Smoothing-iron	Feb. 25, 1873	730	235	3	222
143, 245	Mixer, A. A., assignor of one-half interest to F. Black, Hamilton, Ohio. Potato-bug destroyer	Sept. 30, 1873	810	278	4	357
138, 427	Mixer, W. M., New York, N. Y. Refrigerator building	Apr. 29, 1873	1, 077	{ 339 } { 340 }	{ 3 }	{ 486 }
144, 917	Moeller, P. W., New York, N. Y. Adjustable blackboard	Nov. 25, 1873	652	221	4	565
7, 004	Moeslein, L., New York, N. Y. Ornamental mat	Nov. 25, 1873	.....	.....	4	558
143, 089	Moffat, D., New Orleans, La. Apparatus for extracting cane-juice	Sept. 23, 1873	678	233	4	330
140, 587	Moffat, M., Watertown, Mass. Spinning-mule	July 8, 1873	225	76	4	38

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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142, 860	Moffet, J., New York, N. Y. Cock for drawing beer.....	Sept. 16, 1873	481	164	4	303
142, 260	Moffett, J. K., Watertown, N. Y. Table-leaf support.....	Aug. 26, 1873	786	259	4	226
	Moffitt, J. (See Kennedy, J., assignor.)					
140, 064	Moffitt, D. J., Thorntown, Ind. Fastener for shutters and doors.....	June 17, 1873	575	182	3	679
138, 514	Moffitt, J. W., Harrisburgh, Pa. Brake-shoe.....	May 6, 1873	43	15	3	501
136, 086	Mohr, W., New York, N. Y. Rocking chair.....	Feb. 18, 1873	640	209	3	203
137, 230	Molan, P., New York, N. Y. Dinner-pail.....	Mar. 25, 1873	799	264	3	338
138, 915	Molineux, E. L., Brooklyn, N. Y. Preparing and packing water-colors.....	May 13, 1873	404	127	3	541
7, 064	Molnar, A., New York, N. Y. Fur trimming..... (Design)	Dec. 16, 1873			4	641
139, 177	Moloney, G. P., Detroit, Mich. Pipe-wrench.....	May 20, 1873	654	204	3	574
142, 861	Moloney, J., assignor of one-fourth interest to P. Saxton and J. C. Welch, Oil City, Pa. Tubing for oil-wells.....	Sept. 16, 1873	482	164	4	303
134, 694	Molt, G., Millbury, Mass. Indigo-blue vat for coloring wool and cotton.....	Jan. 7, 1873	185		3	21
140, 426	Monce, S. G., Bristol, Conn. Glaziers' tool.....	July 1, 1873	70	25	4	14
	Moncrieff, G. (See Dugan & Moncrieff.)					
144, 120	Moncrieff, A., Culfargie, Scotland. Means for operating heavy guns.....	Oct. 28, 1873	683	226	4	464
135, 142	Moneuse, E., New York, N. Y. Steam-boiling apparatus.....	Jan. 21, 1873	594	193	3	83
	Monges, G. (See Palmierie, H., assignor)..... (Reissue.)					
137, 314	Monk, J., Norwich, Conn. Hub for wheels of vehicles.....	Apr. 1, 1873	32	10	3	359
135, 721	Monk, W. G., Brooklyn, N. Y. Drain-pipe.....	Feb. 11, 1873	313		3	164
145, 002	Monro, G. F., Leon, Iowa. Medical compound.....	Nov. 25, 1873	723		4	571
145, 675	Monroe, B. C., Newburgh, N. Y. Masons' hod.....	Dec. 16, 1873	575	189	4	656
	Monroe, B. F. S., Utica, N. Y. Bed-bottom..... (Extension)	Jan. 21, 1873			3	70
	Monson, C., New Haven, Conn. Holder for lamps..... (Extension)	Jan. 18, 1873			3	37
5, 501	Montague, C., assignor to C. C. Child, Boston, Mass. Rotary printing-press..... (Reissue)	July 22, 1873	794	260	4	101
135, 003	Montague, D. B., Springfield, Mass. Hot-air furnace.....	Jan. 21, 1873	477	153	3	73
141, 450	Montague, H. P., Belchertown, Mass. Printers' furniture.....	Aug. 3, 1873	37	11	4	138
135, 241	Montandon, C. A., Locle, Switzerland. Stem winding and setting watches.....	Jan. 28, 1873	706	226	3	104
143, 832	Montfort, R., Butler, Ga. Seed-planter and fertilizer-distributor.....	Oct. 21, 1873	419	139	4	432
136, 851	Montgomery, H. C., Boston, Mass. Stop-valve-cock, &c.....	Mar. 18, 1873	457	151	3	300
	Montgomery, J., Sing Sing, N. Y. Construction of steam-vessels..... (Extension)	Mar. 1, 1873			3	189
	Same..... Screw-propeller..... (Extension)	Apr. 12, 1873			3	386
5, 364	Same..... same..... (Reissue)	Apr. 22, 1873	870	275	3	461
	Montgomery, J. A. (See Schneider & Montgomery)..... (Reissue.)					
	Montgomery, J. A., Springfield, N. Y. Journal-box..... (Extension)	Aug. 2, 1873			4	108
144, 555	Montgomery, L., Akron, assignor of one-half interest to L. Newman, Newstead, N. Y. Lime-kiln.....	Nov. 11, 1873	332	112	4	516
	Mood, L. (See Clinton & Mood.)					
136, 930	Moodie, E. L. B., New York, N. Y. Balloon-advertiser.....	Mar. 18, 1873	521	172	3	305
139, 016	Moody, B. D., Darksville, Mo. Car-coupling.....	May 20, 1873	501	158	3	562
140, 294	Moody, B. D., Darksville, Mo., assignor of one-half interest to J. M. Fullerton and G. W. Snyder, Memphis, Tenn. Self-feeding tank for railways.....	June 24, 1873	789	250	3	704
141, 883	Moody, C., assignor to W. Griffith, Toronto, Canada. Reversible knob-latch.....	Aug. 19, 1873	447	146	4	188
142, 261	Moody, F. G., assignor of one-half interest to G. S. Fairbanks, North Monmouth, Me. Martingale.....	Aug. 26, 1873	786	259	4	226
142, 643	Moody, N. C., Manistee, Mich. Gage for gang-saws.....	Sept. 9, 1873	288	95	4	277
137, 315	Moody, W. F., assignor of two-thirds interest to E. Stone and C. Swift, Chicago, Ill. Dove-tailing machine.....	Apr. 1, 1873	32	10, 11	3	359
145, 304	Moody, W. F., assignor to self, A. H. Frost, and C. L. Ames, Chicago, Ill. Rotary steam-engine.....	Dec. 9, 1873	243	81	4	617
	Mooney, G., et al. (See Barney, C. H., assignor)					
134, 917	Mooney, G., assignor to self and J. Shaw, jr., Providence, R. I. Fishing-reel.....	Jan. 14, 1873	389	124	3	51
	Mooney, L. (See Young, Hewitt, and Mooney.)					
145, 676	Mooney, L., assignor to R. Mooney, Allegheny, Pa. Sad and fluting iron.....	Dec. 16, 1873	575	189	4	656
143, 526	Mooney, M., T. D. Van Dorn, and C. C. Winterberg, Edinburgh, Ind. Railway-car stove.....	Oct. 7, 1873	109	38	4	389
145, 677	Mooney, M. T., Johnstown, Pa. Ingot-mold.....	Dec. 16, 1873	577	189	4	656
	Mooney, R. (See Mooney, L., assignor.)					
137, 316	Moore, A. F., Florence, Ind. Machine for turning axles.....	Apr. 1, 1873	34	11	3	360
	Moore, A. J. (See Moore, J. A., assignor.)					
134, 695	Moore, B., Seaford, Del. Car coupling.....	Jan. 7, 1873	185	60	3	21
	Moore, B. C. (See Worrell & Moore.)					
140, 524	Moore, C., assignor of part interest to C. Baechler and G. Sommer, Jersey City, N. J. Hydraulic air-compressing apparatus.....	July 1, 1873	156	53	4	21
135, 722	Moore, C. C., New York, N. Y. Pulley.....	Feb. 11, 1873	313	99	3	164
145, 359	Same..... Curtain-fixture.....	Dec. 9, 1873	290	97	4	621
141, 805	Moore, C. E., Boston, and M. L. Wyman, Melrose, assignors to C. A. Kihlgren, Boston, Mass. Steam and air brake for railway-cars.....	Aug. 12, 1873	363	119	4	172
141, 159	Moore, C. J., Joliet, Ill. Car-starter.....	July 22, 1873	753	248	4	98
137, 466	Moore, C. T., White Sulphur Springs, assignor of one-half interest to T. L. Feamster, Lewisburgh, W. Va. Type-setting machine.....	Apr. 1, 1873	168	53, 54	3	371
145, 118	Moore, D., Brooklyn, N. Y. Lock for fire-arms.....	Dec. 2, 1873	73	23	4	591
5, 674	Moore, D. & E., Brooklyn, N. Y., assignors to the Bissell and Moore Manufacturing Company, New York, N. Y. Saw-frame..... (Reissue)	Dec. 2, 1873	210	72	4	602
	Moore, D. G. (See Waldron & Moore.)					
140, 939	Moore, D. R., Owego, N. Y. Stove-pipe shelf, &c.....	July 15, 1873	539	180	4	71
	Moore, E. (See Moore, D. & E.)..... (Reissue.)					
	Moore, E. C. (See Moore, G. H., assignor.)					
5, 573	Moore, E. C., Yonkers, N. Y., assignor to Tiffany & Co., New York, N. Y. Design for spoon and fork handles..... (Reissue)	Sept. 16, 1873	582	196	4	312
6, 721	Same..... Jewelry-box..... (Design)	June 24, 1873			3	691
6, 773	Same..... same..... (Design)	July 15, 1873			4	58
6, 982	Same..... Paper-box..... (Design)	Nov. 4, 1873			4	478
136, 663	Moore, E. L., San Francisco, Cal. Accouchement-couch.....	Mar. 11, 1873	288	96	3	277
	Moore, F. M. (See Moore, T. W. & F. M.)..... (Design.)					
	Moore, F. N. (See Moore, T. W., assignor.)					
	Moore, F. N. (See Moore, T. W., assignor)..... (Reissue.)					
134, 918	Moore, G., assignor to M. Moore, Scotch Plains, N. J. Device for aiding cutting goods on bias.....	Jan. 14, 1873	390	124	3	51
134, 919	Same..... Device for marking goods on bias.....	Jan. 14, 1873	391	124	3	51
141, 943	Moore, G. H., Norwich, Conn., and L. Bagger, Washington, D. C., said Moore assignor to E. C. Moore, Norwich, Conn. Lithographic stone.....	Aug. 19, 1873	494		4	192
135, 723	Moore, G. R., Lyons, Iowa. Drain.....	Feb. 11, 1873	313	99	3	164
136, 608	Same..... Sediment-drain.....	Mar. 11, 1873	241	81	3	274
137, 467	Moore, G. R., Philadelphia, Pa. Heating-stove.....	Apr. 1, 1873	171	54	3	371
137, 788	Same..... Sink-drain.....	Apr. 15, 1873	473	148	3	420

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140, 155	Moore, G. R., Philadelphia, Pa. Heating-stove	June 24, 1873	673	211	3	694
143, 774	Same..... Sewer inlet-trap	Oct. 21, 1873	368	122	4	428
145, 360	Same..... Stove-grate	Dec. 9, 1873	291	98	4	621
145, 746	Same..... Car-coupling	Dec. 23, 1873	648	213	4	674
137, 231	Moore, G. W., Philadelphia, Pa. Package-register	Mar. 25, 1873	800	264	3	338
136, 664	Moore, H. R., Erie, Pa. Operating the stops of organs	Mar. 11, 1873	289	96	3	277
143, 456	Moore, J., Brooklyn, N. Y. Fountain and aquarium	Oct. 7, 1873	50	17	4	385
6, 644	Moore, J., and W. H. Wilkinson, Brooklyn, N. Y. Fountain-basin..... (Design)	May 6, 1873	.....	.....	3	497
134, 920	Moore, J., and S. W. Day, Oak Creek, Wis. Machine for making baskets	Jan. 14, 1873	392	124	3	51
145, 225	Moore, J., and W. George, Philadelphia, Pa., and A. L. Holley, Brooklyn, N. Y. Rolling-mill	Dec. 2, 1873	168	57, 58	4	599
141, 451	Moore, J. A., assignor of one-half interest to A. J. Moore, Bethlehem, Pa. Apparatus for sausage-stuffing and other purposes	Aug. 5, 1873	38	12	4	138
144, 918	Moore, J. A., Salem, N. J. Corn-coverer	Nov. 25, 1873	653	221	4	565
135, 930	Moore, J. C., Madison, Ind. Sewing-machine	Feb. 18, 1873	507	165	3	193
138, 270	Moore, J. C., Ypsilanti, Mich. Log-turner.....	Apr. 29, 1873	937	296	3	475
	Moore, J. D. (See Hirus & Moore.)					
	Moore, J. D. (See Pierson, Macy & Moore.)					
	Moore, J. G., et al. (See Flora, O. V., assignor.)					
141, 944	Moore, J. W., assignor to self and P. G. Meek, Bellefonte, Pa. Apparatus for preserving beer on draft	Aug. 19, 1873	495	163	4	192
	Moore, M. (See Moore, G., assignor.)					
144, 469	Moore, R., Nashville, Tenn. Portable-stove	Nov. 11, 1873	258	87	4	511
	Moore, S., et al. (See Brigham, C. H., assignor.)					
	Moore, S. (See Rogers & Felton, assignors.)					
139, 257	Moore, S., assignor of two-thirds interest to M. D. Hathaway and E. Gardner, Rochelle, Ill. Grain-cleaner	May 27, 1873	736	233	3	588
139, 598	Moore, S., assignor to self and H. Rogers, Sudbury, Mass. Manufacture of leather-board	June 3, 1873	133	.....	3	620
144, 556	Same..... Heel-stiffener for boots and shoes	Nov. 11, 1873	333	112	4	517
144, 557	Moore, S., and R. H. Hurlbut, assignors to selves and H. Rogers, Sudbury, Mass. Paper-pulp engine	Nov. 11, 1873	333	112	4	517
	Moore, T. L. (See Howland & Moore.)					
5, 603	Moore, T. W., New York, N. Y., assignor to F. N. Moore. Bedstead-fastening.. (Reissue)	Oct. 14, 1873	328	109	4	415
137, 380	Same..... Combined bureau, washstand, and wardrobe..... (Design)	Apr. 1, 1873	89	29	3	364
6, 722	Moore, T. W. & F. M., New York, N. Y. Furniture	June 24, 1873	.....	.....	3	691
	Moore, T. W. C. (See Morrison, A. J., assignor.)					
	Moore, W. A. (See Branch, G. M., assignor.)					
144, 215	Moore, W. Z., Vallejo, Cal. Compound for cleansing metals, &c	Nov. 4, 1873	41	.....	4	481
141, 657	Moorhouse, R. O., and S. L. Wiegand, said Wiegand assignor to said Moorhouse, Philadelphia, Pa. Boring-machine	Aug. 12, 1873	232	73	4	162
142, 806	Moor, J., Philadelphia, Pa. Refrigerator for transporting ice-cream, &c	Sept. 16, 1873	437	148	4	300
139, 684	Morahan, B., Brooklyn, assignor to self, F. Tefft, and G. G. Kellogg, New York, N. Y. Stationary wash-tub	June 10, 1873	225	72	3	643
139, 685	Same..... same	June 10, 1873	225	72	3	643
140, 588	Moran, J. D., New York, N. Y. Metal window-sash	July 8, 1873	226	76	4	38
141, 806	Moran, T., New York, N. Y. Shade-holder	Aug. 12, 1873	364	119	4	172
134, 557	Morawetz, L. F., Baltimore, Md. Music-leaf turner	Jan. 7, 1873	51	16	3	11
135, 658	Mörchen, C., and P. Doerfer, Eaton, Wis. Stump-extractor	Feb. 11, 1873	256	81	3	160
135, 044	Morden, W. J., Indianapolis, Ind. Construction of buildings	Jan. 21, 1873	515	166	3	76
	More, E. P. (See Anderson, Walden & More.)					
134, 558	Moreau, E., San Francisco, Cal. Button-holing attachment for sewing-machines	Jan. 7, 1873	52	16, 17	3	11
5, 235	Morehouse, C. B., Newcastle, Ind., assignor by mesne assignment to E. Chamberlin and J. O. Merriam. Whip-socket	Jan. 14, 1873	435	138	3	55
5, 713	Same..... Device for clamping whip-sockets to vehicles..... (Reissue)	Dec. 30, 1873	1,007	324	4	713
	Morehouse, G. E. (See Wells & Morehouse.)					
137, 945	Moreland, D. R., and C. Blocher, Broad Ford, Pa. Nail-extractor	Apr. 15, 1873	604	190	3	431
135, 659	Morey, D., Watsonville, Cal. Straw-feeding attachment for furnaces	Feb. 11, 1873	256	81	3	160
139, 075	Same..... same	May 20, 1873	557	175	3	566
145, 119	Morey, H., Cameron, Tex. Machine for building earth-works	Dec. 2, 1873	74	23	4	591
	Morgan, A. (See Davie & Morgan.)					
	Morgan & Dore. (See Hawkins, L. P., assignor.)					
141, 066	Morgan, B., San Francisco, Cal. Candle-guard	July 22, 1873	666	224	4	91
144, 470	Morgan, C., assignor to self and F. Manning, Philadelphia, Pa. Fire-escape for safes.....	Nov. 11, 1873	258	87	4	511
	Morgan, D. S. (See Seymour & Morgan.)					
135, 143	Morgan, E. B., Paterson, N. J. Postage-stamp affixer	Jan. 21, 1873	594	193	3	83
	Morgan, E. J. (See Clinton & Morgan.)					
	Morgan, G. C. (See Prosser & Morgan.)					
	Same..... (See Prosser, T. T., assignor.)					
136, 852	Morgan, G. C., Chicago, Ill. Railway-rail	Mar. 18, 1873	458	152	3	300
144, 471	Morgan, J. S., Brooklyn, N. Y. Curling-iron	Nov. 11, 1873	259	87	4	511
139, 912	Morgan, M. C., Boston, Mass. Organ-reed	June 17, 1873	446	139	3	668
139, 017	Morgan, P. H., assignor to Granite Roofing Company, Baltimore, Md. Water-proofing compound for canvas and other fabrics	May 20, 1873	502	.....	3	562
	Morgan, T. K., et al. (See Dilworth, J., assignor.)					
	Morgan, T. R. (See Marchand, C. E., assignor.)					
	Morgan, W. F., (See Hawkins, L. P., assignor.)					
	Morgan, W. F., et al. (See Ross & Miller, assignors.)					
	Same..... (See Ross, J. G., assignor.)					
138, 178	Morgan, W. F., New York, N. Y. Construction of vessels	Apr. 22, 1873	825	262	3	458
138, 677	Same..... Railway-crossing gate	May 6, 1873	187	60	3	512
141, 160	Morgan, W. F., Buffalo, assignor to the Great American Malt and Grain Drying Company, New York, N. Y. Grain-drier	July 22, 1873	754	248	4	98
142, 262	Morgan, W. F., New York, N. Y. Removable ceiling for vessels	Aug. 26, 1873	787	260	4	226
142, 496	Same..... Boat-detaching device	Sept. 2, 1873	159	52	4	254
5, 618	Morgeneier, J. W., Sheboygan, Wis. Varnish for coating photographic negatives. (Reissue)	Oct. 21, 1873	522	.....	4	441
146, 013	Morin, J., New York, N. Y. Lubricating journal-boxes	Dec. 30, 1873	903	292	4	705
	Morissette, J. (See Darozir, L., assignor.)					
137, 559	Morley, F. A., Syracuse, N. Y. Liquid meter	Apr. 8, 1873	261	80	3	390
134, 762	Morley, T., Cambridge, Mass. Medical compound	Jan. 14, 1873	251	.....	3	41
138, 038	Morley, T., Newark, N. J. Toy	Apr. 22, 1873	708	224	3	448
137, 946	Morningstar, B., Pittsburgh, Pa. Combined door-plate and letter-chute	Apr. 15, 1873	605	190	3	431
141, 067	Morrell, J. A., New York, N. Y. Manufacture of sugar	July 22, 1873	667	.....	4	91
141, 068	Same..... Process for delaying the fermentation of saccharine solutions	July 22, 1873	668		4	91

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141, 807	Morrell, J. A., and J. Brewer, New York, N. Y. Submerged pump.	Aug. 12, 1873	364	120	4	172
142, 497	Morrell, J. A., assignor to self, J. H. Wheatley, L. P. Williams, and G. H. Baxter, New York, N. Y. Heating air for use in the arts.	Sept. 2, 1873	160		4	254
136, 609	Morrell, J. C., Manchester, England. Ash-screener and commode.	Mar. 11, 1873	242	82	3	274
134, 763	Morrill, C. E., Deering, Me. Device for fastening ends of shoe-binding strips.	Jan. 14, 1873	251	82	3	41
142, 498	Morrill, F. (See Elliott, G. R., assignor.)					
	Morrill, J. A., assignor to self, J. H. Wheatley, L. P. Williams, and G. H. Baxter, New York, N. Y. Granulating sugar.		160		4	255
	Morrill, J. P. (See Lombard, Morrill & Sweat.)					
135, 660	Morrill, S., Vienna, Me. Sleigh.	Feb. 11, 1873	257	81	3	160
137, 468	Morrill, S. S., Fulton, N. Y. Main-spring attachment for watches.	Apr. 1, 1873	171	54	3	371
	Morris & Ireland. (See Hawkins, G. C., assignor.)					
134, 921	Morris, A. H., Boston, Mass. Horse-cover.	Jan. 14, 1873	392	125	3	51
138, 179	Morris, A. T., Bloomfield, N. J. Dumping-scow.	Apr. 22, 1873	827	263	3	458
145, 890	Morris, C. N., Cincinnati, Ohio. Feed-gauge for printing-presses.	Dec. 23, 1873	772	252	4	684
146, 089	Morris, D. B., Pittsburgh, Pa. Hot-air furnace.	Dec. 30, 1873	967	312	4	710
137, 617	Morris, D. C., New Sharon, Iowa. Car-coupling.	Apr. 8, 1873	309	96	3	394
140, 840	Morris, E., Burlington, N. J. Preparation of solder for sealing oyster and fruit cans.	July 15, 1873	443	151	4	64
145, 305	Same. Bedstead.	Dec. 9, 1873	243	82	4	617
136, 748	Morris, E., and W. H. Kimball, Burlington, N. J., said Kimball assignor to said Morris. Soldering-machine.	Mar. 11, 1873	359	118	3	283
145, 442	Morris, E. M., Baltimore, Md. Gas-cock.	Dec. 9, 1873	360	120	4	626
137, 088	Morris, F., San Francisco, Cal. Amalgamator.	Mar. 25, 1873	673	223	3	329
138, 678	Morris, G. W., Pittsburgh, Pa. Railway-car brake.	May 6, 1873	188	60	3	513
144, 472	Morris, G. W., and W. Lenhart, Corry, Pa. Combined carpet-rag looper and button-hole cutter.	Nov. 11, 1873	260	87	4	511
136, 447	Morris, H. C., assignor to T. H. Hazard, Richmond, Va. Artificial food.	Mar. 4, 1873	81		3	252
143, 585	Morris, J. A., Atlanta, Ga. Shutter-fastening.	Oct. 14, 1873	175	59	4	403
6, 743	Morris, J. E., Minneapolis, Minn. Flower-stand. (Design).	July 1, 1873			4	8
134, 696	Morris, J. R., Houston, Tex. Lubricating car-axle.	Jan. 7, 1873	187	60	3	21
138, 916	Same. Journal-box.	May 13, 1873	405	127	3	541
144, 216	Morris, J. S., Mosestown, Pa. Beefsteak-tenderer.	Nov. 4, 1873	42	12	4	481
	Morris, Tasker & Co. (See Newsham, W. L., assignors.)					
	Same. (See Tasker & McMillan, assignors.)					
138, 341	Morris, W., Dayton, Ohio. Lubricator.	Apr. 29, 1873	1,001	315	3	480
	Morris, W. D. (See Downs & Morris.)					
137, 381	Morris, W. J., New York, N. Y. Gun-lock.	Apr. 1, 1873	90	29	3	364
140, 940	Morris, W. H., Brooklyn, assignor to self and A. B. Ross, New York, N. Y. Smoking-pipe.	July 15, 1873	540	180	4	71
	Morris, W. H. H. (See Eastman & Morris.)					
143, 246	Morrison, A., Harrisburgh, Pa. Apparatus for separating nails.	Sept. 30, 1873	811	279	4	357
144, 407	Same. Nail distributor.	Nov. 11, 1873	205	69	4	507
142, 807	Morrison, A. J., Troy, assignor of one-half interest to T. W. C. Moore, Mohawk, N. Y. Car-ventilator.	Sept. 16, 1873	438	148	4	300
144, 348	Morrison, C. F., Thompsonville, Conn., assignor to self, J. Morrison, G. S. Harwood, and G. H. Quincy. Evener for wool-cards.	Nov. 4, 1873	146	49	4	490
135, 354	Morrison, E. R., assignor to self and J. S. Stites, Washington, D. C. Fire-escape.	Jan. 28, 1873	803	259	3	112
137, 317	Morrison, F. L., New Albany, Pa. Stencil-plate.	Apr. 1, 1873	35	11	3	360
138, 039	Morrison, H. B., Le Roy, N. Y. Breast-collar for harness.	Apr. 22, 1873	708	224	3	448
142, 929	Morrison, H. B., Le Roy, assignor to Sargent & Greenleaf, Rochester, N. Y. Machine for forming sheet-metal pipe-elbows.	Sept. 16, 1873	537	183	4	308
	Morrison, J., et al. (See Morrison, C. F., assignor.)					
141, 371	Morrison, J., Joliet, Ill. Reverberatory furnace.	July 29, 1873	971	315	4	122
144, 349	Morrison, J., and H. M. Hutchinson, Philadelphia, Pa. Chair.	Nov. 4, 1873	147	49	4	490
	Morrison, J. A. (See Collins & Morrison.)					
142, 263	Morrison, J. B., Brooklyn, N. Y. Adjustable bracket.	Aug. 26, 1873	787	260	4	226
139, 178	Morrison, J. C., assignor of one-half interest to N. C. Gridley and F. F. Warner, Chicago, Ill. Polishing device.	May 20, 1873	654	204	3	574
139, 018	Morrison, J. E., Wellington, Conn. Driven or bored well.	May 20, 1873	503	158	3	562
136, 087	Morrison, J. H., Marlborough, Mass. Sole edge-setting-tool.	Feb. 18, 1873	640	209	3	203
137, 560	Morrison, J. L., and T. H. Fletcher, North Hollis, Me. Scythe-stone holder.	Apr. 8, 1873	262	81	3	390
	Morrison, J. W. (See Coffin, C. H., assignor.)					
5, 646	Morrison, L., and A. G. Harms, Allegheny City, Pa. Saw-hangings. (Reissue).	Nov. 4, 1873	180	61	4	493
5, 647	Same. same. (Reissue).	Nov. 4, 1873	181	61	4	493
	Morrison, R. D., et al. (See Bushfield, S. B., assignor.)					
	Same. same. (Reissue.)					
145, 443	Morrison, R. H. D., assignor of one-half interest to J. Taisey, Winona, Minn. Seed-drill.	Dec. 9, 1873	360	120	4	626
141, 452	Morrison, S. G., Williamsport, Pa. Coal-stove grate.	Aug. 5, 1873	38	12	4	138
146, 014	Morrison, T. F., Findley, Ohio. Eave-trough support.	Dec. 30, 1873	904	293	4	705
139, 805	Morrison, T. W., New Brunswick, N. J. Sewing-machine table.	June 10, 1873	344	106	3	652
	Morrison, W. A., et al. (See Cherrington, W. P., assignor.)					
137, 789	Morrison, W. A., Cambridge, Mass. Elevator.	Apr. 15, 1873	474	148	3	420
	Morrow, R. (See Paine, J. F., assignor.)					
	Morrow, W. H., et al. (See Walker, J. A., assignor.)					
141, 884	Morse, B., Ithaca, N. Y. Horse hay-rake.	Aug. 19, 1873	448	146	4	188
145, 520	Same. Seed-sower.	Dec. 16, 1873	444	145	4	645
138, 040	Morse, B. R., Galesburgh, Ill. Ear-coverings for hats and caps.	Apr. 22, 1873	709	224	3	448
	Morse, H. C., et al. (See Palmer & Spencer, assignors.)					
142, 577	Morse, J. F., Oshkosh, Wis. Dredger.	Sept. 9, 1873	237	77	4	273
	Morse, L. (See Morse, L. B., assignor.)					
	Same. same. (Reissue.)					
5, 380	Morse, L. B., Athol, Mass., assignor of one-half interest to L. Morse. Cot-bed. (Reissue).	Apr. 29, 1873	1,111	351	3	489
135, 573	Same. same. (Reissue.)	Feb. 4, 1873	166	53	3	140
	Morse, T. G. (See Booner, Morse & Boschert.)					
	Morse Twist-Drill and Machine Company. (See Johnson, M. C., assignor.)					
	Morss, J. (See Marston, F. W., assignor.)					
	Morthland, R. J., administratrix. (See Kaufman, J. G.)					
136, 088	Morton, E. W., Brooklyn, N. Y. Mechanical power.	Feb. 18, 1873	641	210	3	203
136, 532	Morton, F. G., Bermondsey, Great Britain. Treating tinner's clippings.	Mar. 4, 1873	162		3	258
	Morton, G. W., et al. (See York, J. W., assignor.)					
5, 544	Morton, J., Cincinnati, Ohio, assignor by mesne assignment to the McGowan Pump Company. Water-tank for railways. (Reissue).	Aug. 19, 1873	622	205	4	202
5, 545	Same. same. (Reissue.)	Aug. 19, 1873	623	205	4	203
141, 808	Morton, J., Cincinnati, Ohio., assignor to self and G. S. Huntington. Road-scraper.	Aug. 12, 1873	366	120	4	172
145, 891	Morton, S. A., Wadesborough, N. C. Curry-comb.	Dec. 23, 1873	772	252	4	684
	Morton, T. C. (See Stever, J., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
135, 999	Moseley, C. H., Winchester, Mass. Machine for desiccating tan	Feb. 18, 1873	564	186	3	198
136, 533	Moseley, L. E. (See Culver & Moseley.)					
136, 533	Moseley, T. W. H., Hyde Park, Mass. Lifting-jack	Mar. 4, 1873	163	52	3	258
140, 941	Same..... Construction of houses	July 15, 1873	541	{ 180 181	{ 4	71
140, 942	Same..... same	July 15, 1873	542	{ 181 182	{ 4	71
140, 943	Same..... Gage for erecting plank walls	July 15, 1873	543	182	4	72
143, 175	Moses, A. W., Philadelphia, Pa. Car-spring	Sept. 23, 1873	742	256	4	335
141, 584	Mosher, A., Canton, Mo. Portable fence	Aug. 5, 1873	149	48	4	147
137, 790	Mosher, C. D., Cook County, Ill. Photographic sky-light	Apr. 15, 1873	475	149	3	420
142, 808	Mosher, D. C., Washington, D. C. Needle for weaving cane-seats for chairs	Sept. 16, 1873	440	148	4	300
137, 469	Mosher, D. G., Mosherville, Mich. Insect-destroyer	Apr. 1, 1873	172	55	3	371
138, 917	Moshier, W., assignor of one-third interest to C. T. Merry, Norwalk, Ohio. Rubber cement	May 13, 1873	406	.....	3	541
136, 255	Mosier, J. L. H., assignor to Brewster & Co., New York, N. Y. King-bolt for carriages	Feb. 25, 1873	799	259	3	228
138, 342	Same..... King-bolt for perch-carriages	Apr. 29, 1873	1,002	315	3	480
6, 490	Mosman, D., West Meriden, Conn. Lamp-stand	Mar. 11, 1873	.....	.....	3	272
6, 577	Mosman, M. H., Waterbury, Conn. Fork and spoon handle	Apr. 8, 1873	.....	.....	3	387
6, 616	Mosman, M. H., Chicopee, Mass. Lamp-stand	Apr. 29, 1873	.....	.....	3	471
138, 573	Most, W., Greenville, N. J. Picket fence	May 6, 1873	96	30	3	505
142, 038	Motard, F. M. H., Paris, France. Mode of recovering and regenerating steam in motive-power engines	Aug. 19, 1873	579	191	4	199
143, 090	Mott, J. L. (See Demarest, J., assignor.)					
141, 372	Mott, S. D., Milford, Pa. Boy's sled	Sept. 23, 1873	679	234	4	330
138, 679	Mott, T. H., New York, N. Y. Apparatus for heating and ventilating railroad-cars	July 29, 1873	971	316	4	122
136, 381	Mott, T. P., and S. Gardiner, jr., said Gardiner assignor of one-sixth interest to T. P. Mott, New York, N. Y. Electrical gun-cartridge	May 6, 1873	189	60	3	513
135, 144	Motter, G. L., Bloomington, Ill. Dining-table	Mar. 4, 1873	27	10	3	247
134, 922	Motz, E., Woodward, Pa. Paper-file	Jan. 21, 1873	595	193	3	83
136, 089	Moulthrop, C. W. (See Allen, Brown & Moulthrop.)					
136, 610	Moulton, A. R., Falls Branch, Tenn. Pruning-shears	Jan. 14, 1873	393	125	3	51
136, 089	Moulton, E. S., Chelsea, Mass. Pipe-wrench	Feb. 18, 1873	642	210	3	203
136, 610	Moulton, G. W. (See Johnson & Moulton.)					
141, 658	Moulton, J., Moultonville, N. H., assignor to self and W. P. B. Brooks, Chelsea, Mass. Car-coupling	Mar. 11, 1873	242	82	3	274
145, 226	Moulton, J. H. (See Perkins, Moulton & Sawyer.)					
145, 226	Moulton, L. V., Beaver Dam, Wis. Machine for washing photographs	Aug. 12, 1873	233	73	4	162
145, 227	Moulton, W. J. L., San Francisco, Cal., assignor to Jeinson Lubricator Company. Lubricating device for car-axles	Dec. 2, 1873	170	58	4	599
145, 227	Same..... Car-axle box	Dec. 2, 1873	171	59	4	599
136, 749	Mount, J. A. (See Conover S. R., assignor.)					
140, 065	Mount, W. R. (See Ingels & Mount.)					
144, 783	Mountain, H. B., New York, N. Y. Life-preserving mattress	Mar. 11, 1873	359	119	3	283
139, 686	Mouret, L. J. N., Paris, France. Clock-work globe	June 17, 1873	575	182	3	679
140, 525	Mowbray, A. G. & H. W., Stockton, Minn. Middlings-bolt	Nov. 18, 1873	529	180	4	544
135, 438	Mowbray, G. M., North Adams, Mass. Electric fuse	June 10, 1873	227	73	3	643
139, 179	Mowbray, H. W. (See Mowbray, A. G. & H. W.)					
140, 944	Mowry, E. C., et al. (See Ross, L. E., assignor.)					
141, 161	Mowry, W. G., and C. Pulis, New York, N. Y. Carpet-beater	July 1, 1873	158	54	4	21
141, 373	Moyel, E., Wyandotte, Kans. Feed-water heater for locomotives	Feb. 4, 1873	43	13	3	131
140, 945	Moyel, E., and J. Howell, Wyandotte, Kans. Railway-axle-box cover	May 20, 1873	655	204	3	574
139, 599	Mozart, D. J., Ann Arbor, Mich. Escapement for watches	July 15, 1873	544	183	4	72
141, 161	Same..... Calendar watch	July 22, 1873	756	249	4	98
141, 373	Same..... Self-winding watch	July 29, 1873	972	316	4	123
140, 945	Mueller, C., Warren, Mass. Roofing-composition	July 15, 1873	544	.....	4	72
137, 791	Mueller, C. G., and H. Meier, said Meier assignor to said Mueller, Hanover, Germany. Electrical gas-lighting	June 3, 1873	134	44	3	620
140, 066	Mueller, E. L., Saint Louis, Mo. Egg-carrier	Apr. 15, 1873	476	149	3	420
144, 558	Mueller, F. (See Quinke, L., assignor.)					
138, 095	Mühleisen, A., Ottawa, Ohio. Hound for vehicles	June 17, 1873	577	182	3	679
140, 722	Same..... Thill for vehicles	Nov. 11, 1873	334	113	4	517
139, 414	Mulcahy, D., Boston, Mass. Refrigerator	Apr. 22, 1873	757	240	3	452
139, 415	Muldaur, E. H., Dover, Del. Alphabet-block	July 8, 1873	337	114	4	47
137, 470	Mulford, J. E., New York, N. Y. Fire-proof safe	May 27, 1873	876	281	3	599
141, 723	Same..... Fire-proof building	May 27, 1873	877	281	3	599
136, 853	Mulhollen, H., Fostoria, Pa. Car-coupling	Apr. 1, 1873	173	55	3	371
136, 854	Mull, W., Rantoul, Ill. Corn-planter	Aug. 12, 1873	286	93	4	166
136, 931	Mullaly, J., New York, N. Y. Machine for melting snow	Mar. 18, 1873	458	152	3	301
136, 932	Same..... same	Mar. 18, 1873	459	152	3	301
137, 018	Same..... same	Mar. 18, 1873	523	172	3	305
137, 019	Same..... same	Mar. 18, 1873	523	173	3	305
137, 020	Same..... same	Mar. 18, 1873	599	198	3	312
139, 180	Same..... same	Mar. 18, 1873	599	198	3	312
143, 833	Same..... Angling-fly	Mar. 18, 1873	600	199	3	312
143, 834	Same..... Means of keeping open the navigation of canals	May 20, 1873	655	205	3	574
136, 448	Same..... Machine for melting snow	Oct. 21, 1873	420	140	4	433
144, 350	Müller, G., New York, N. Y. Combined latch and lock	Oct. 21, 1873	421	140	4	433
136, 332	Same..... Elevator for buildings, &c	Mar. 4, 1873	81	28	3	252
138, 918	Mullay, J., Somerville, Mass. Prepared lumber for joiners' use	Nov. 4, 1873	148	49	4	490
142, 930	Mullennex, H. W., Alpine, New York. Farm gate	Feb. 25, 1873	868	279	3	233
143, 922	Müller, A., Jersey City, N. J. Machine for making drain-pipes, &c	May 13, 1873	406	128	3	541
5, 338	Same..... Manufacture of asphalt pipe	Sept. 16, 1873	538	184	4	308
140, 295	Müller, D. (See Goetze & Müller.)					
135, 439	Müller, F., Boston, Mass. Tassel-clip for window-shades	Oct. 21, 1873	491	{ 165 166	{ 4	438
143, 586	Same..... Tassel-clip for curtains	Mar. 25, 1873	850	278	3	342
145, 892	Müller, J., Nacogdoches County, Tex. Horse-power	June 24, 1873	789	250	3	704
145, 810	Same..... Hay and cotton press	Feb. 4, 1873	43	13	3	131
143, 416	Muller, J., Philadelphia, Pa. Bridle for horses	Oct. 14, 1873	175	59	4	403
	Müller, J. G. & W., Dayton, Ohio. Apparatus for manufacturing illuminating-gas	Dec. 23, 1873	773	253	4	684
	Muller, L., Hartford, Conn. Shutter-worker	Dec. 23, 1873	701	230	4	678
		Oct. 7, 1873	20	8	4	382

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 835	Muller, N., New York, N. Y. Toy-block for object-teaching.....	Oct. 21, 1873	422	140	4	433
137, 089	Müller, T. H., Yonkers, N. Y. Lead-pencil.....	Mar. 25, 1873	674	224	3	329
140, 946	Same..... Machine for finishing pencils.....	July 15, 1873	545	183	4	72
6, 528	Müller, W. (See Müller, J. G. and W.).....					
142, 407	Muller, W. F., New York, N. Y. Inkstand..... (Design)	Mar. 25, 1873			3	325
142, 407	Mullin, R. J., assignor to self and M. R. Hanley, Providence, R. I. Manufacture of dies for punching.....	Sept. 2, 1873	77	25	4	248
145, 228	Muldowny, J. F., Pittsburgh, J. Cope, Connellsville, and S. R. Brooks, Pittsburgh, Pa. Car-coupling.....	Dec. 2, 1873	171	59	4	599
136, 449	Mumford, T. T. (See Brooke, J. M., assignor.).....					
141, 069	Muncaster, O. M., Washington, D. C. Pessary adjuster.....	Mar. 4, 1873	82	28	3	252
141, 453	Same..... Pessary.....	July 22, 1873	668	224	4	91
142, 499	Munde, P., East Hampton, Mass. Folding-table.....	Aug. 5, 1873	39	12	4	138
144, 691	Mundella, J. (See Beven, T., assignor.).....					
138, 041	Munder, M. P., Baltimore, Md. Medical compound or liniment.....	Sept. 2, 1873	161		4	255
138, 680	Munger, A. S., Brooklyn, N. Y., assignor to E. T. Covell, New Bedford, Mass. Seaming machine.....	Nov. 18, 1873	453	153	4	538
138, 919	Munger, F. M., United States revenue-service, assignor of one-half interest to E. L. Deane, Hampden, Me. Boat-detaching apparatus.....	Apr. 22, 1873	710	224	3	448
139, 687	Munger, W. T., assignor to P. & F. Corbin, New Britain, Conn. Mortise door-lock.....	May 6, 1873	190	60	3	513
	Same..... Reversible latch.....	May 13, 1873	406	128	3	541
	Same..... Bell-pull.....	June 10, 1873	228	73	3	643
135, 574	Munhall, T. T. (See Pratt & Munhall.).....					
143, 417	Munn, W. B., Cleveland, Ohio. Lightning-rod.....	Feb. 4, 1873	167	54	3	141
144, 121	Munroe, F. B., Malden, assignor to W. W. Richardson, Westfield, Mass. Whip socket.....	Oct. 7, 1873	21	8	4	382
	Munroe Organ-Reed Company. (See Munroe, W., assignor.).....					
136, 611	Munroe, W., assignor to Munroe Organ-Reed Company, Worcester, Mass. Organ-reed board.....	Oct. 28, 1873	685	227	4	464
140, 723	Munschauer, G. J., Buffalo, N. Y. Bird-cage.....	Mar. 11, 1873	243	82	3	274
140, 067	Munsey, J. H. C. (See Marr, A. D., assignor.).....					
140, 526	Munson, C. M., Greenfield, Mass. Carriage-curtain knob.....	July 8, 1873	338	114	4	47
140, 527	Munson, D., Indianapolis, Ind. Egg-beater.....	June 17, 1873	577	182	3	679
145, 003	Munson, S. B., jr., Chicago, Ill. Iron window-shutter.....	July 1, 1873	159	54	4	21
139, 514	Same..... Garbage-tub.....	July 1, 1873	159	54	4	21
144, 408	Muntzenberger, A., Kenosha, Wis. Barrel-washer.....	Nov. 25, 1873	724	244	4	571
144, 857	Munzinger, P., Philadelphia, Pa. Gas-governor and by-pass.....	June 3, 1873	61	20, 21	3	613
136, 450	Same..... By-pass for gas-works.....	Nov. 11, 1873	207	69	4	507
	Same..... Gas-retort mouth-piece.....	Nov. 25, 1873	608	207	4	561
135, 004	Murch, I. F., Sumner, assignor of one-half interest to S. Torrey, Deering, Me. Tool-holder.....	Mar. 4, 1873	83	28	3	252
143, 091	Murden, E. O., Hightstown, N. J. Hygienic basin and steam-bath.....	Jan. 21, 1873	479	154	3	74
143, 991	Murdock, L., Marble Hill, Mo. Propelling mechanism for vessels.....	Sept. 23, 1873	680	234	4	330
143, 992	Murdock, C., Sarnia, Canada. Stave-jointing machine.....	Oct. 28, 1873	573	191	4	455
	Same..... Machine for sawing staves.....	Oct. 28, 1873	575	{ 191 } { 192 }	{ 4 }	{ 455 }
139, 181	Murdock, C. A., Milwaukee, Wis. Can.....	May 20, 1873	656	205	3	574
144, 692	Murdock, C. F., Detroit, Mich. Valve.....	Nov. 18, 1873	454	154	4	538
144, 217	Murgatroyd, F., Cleveland, Ohio. Hoisting-engine.....	Nov. 4, 1873	42	12	4	481
139, 325	Murgatroyd, T., Hiawatha, Kans. Carriage-spring.....	May 27, 1873	794	253	3	593
138, 271	Murphy, A. A., Montreal, Canada. Store-stool.....	Apr. 29, 1873	938	296	3	475
136, 171	Murphy, J., New York, N. Y. Machine for grinding harvester-knives.....	Feb. 25, 1873	731	236	3	222
140, 298	Murphy, J., assignor to self and G. W. Carr, Philadelphia, Pa. Skipping-rod.....	June 24, 1873	792	252	3	705
144, 280	Murphy, J. A. (See Doyle & Murphy.).....					
142, 264	Murphy, J. G., Matteawan, N. Y. Slate-washer.....	Nov. 4, 1873	92	30	4	485
135, 145	Murphy, J. W., Baltimore, Md. Packing for hydrants, pumps, &c.....	Aug. 26, 1873	789	260	4	226
136, 333	Murphy, M., Cincinnati, Ohio. Paper-bag machine.....	Jan. 21, 1873	595	194	3	83
141, 659	Murphy, P., New York, N. Y. Stereoscope.....	Feb. 25, 1873	868	{ 279 } { 280 }	{ 3 }	{ 233 }
143, 457	Murphy, P., South Amesbury, Mass. Hub for carriage-wheels.....	Aug. 12, 1873	234	73	4	162
142, 171	Murphy, R. Y., assignor to A. James, Chicago, Ill. Toy-gun.....	Oct. 7, 1873	50	18	4	385
134, 565	Murphy, T., Pine Bluff, Wis. Harvester-rake.....	Aug. 26, 1873	711	235	4	219
	Murphy, T. G., deceased, by M. A. Scanlon, Akron, Ohio, executrix, and assignor of one-half interest to H. S. Danforth, Middlebury, Ohio. Machine for cutting matches.....	Jan. 7, 1873	59	18	3	12
143, 923	Murphy, T. H., New Orleans, La. Machine for rolling fabrics..... (Extension)	May 17, 1873			3	527
140, 296	Murray, A. A., Baltimore, Md. Gage-cock.....	Oct. 21, 1873	492	166	4	438
140, 297	Murray, C. H., Southwark, England. Brick-machine.....	June 24, 1873	790	251	3	704
	Same..... Die or mouth for brick-machines.....	June 24, 1873	792	251	3	705
	Murray, Dougall & Co. (See Bates & Murray, assignors.).....					
139, 600	Same..... (See Murray, S. W., assignor.).....					
143, 370	Murray, E. H., Saint Paul, Minn. Food from wheat, and process of preparing the same.....	June 3, 1873	136		3	620
	Murray, J. H., et al. (See York, J. W., assignor.).....					
135, 485	Murray, J. H., Hollidaysburgh, Pa. Lubricating car-wheels.....	Sept. 30, 1873	925	313	4	366
142, 116	Murray, O. (See Doeg, I., assignor.).....					
5, 406	Murray, O., New Market, N. H. Cotton-gin.....	Feb. 4, 1873	85	27	3	134
5, 546	Murray, R., New Castle, Del. Machine for splitting wood.....	Aug. 26, 1873	667	220	4	216
136, 172	Murray, S. W. (See Bates & Murray.).....					
137, 857	Murray, S. W., and B. P. Lamason, Milton, Pa. Railway oil-car..... (Reissue)	May 13, 1873	458	144	3	545
137, 858	Same..... Ring-bolt for railway car-trucks..... (Reissue)	Aug. 19, 1873	624	205	4	203
144, 031	Murray, S. W., assignor to Murray, Dougall & Co., Milton, Pa. Punching-machine.....	Feb. 25, 1873	732	236	3	222
144, 032	Murray, W., New York, N. Y. Trimming.....	Apr. 15, 1873	533	166	3	425
144, 033	Same..... same.....	Apr. 15, 1873	534	166	3	425
	Same..... same.....	Oct. 28, 1873	611	202	4	458
	Same..... same.....	Oct. 28, 1873	611	202	4	458
	Same..... same.....	Oct. 28, 1873	612	202	4	458
144, 122	Murset, S., and E. Zuberbuhler, Philadelphia, Pa. Fire-escape.....	Oct. 28, 1873	686	227	4	464
134, 815	Muschar, C., Pittsburgh, Pa. Mortising machine.....	Jan. 14, 1873	298	96	3	44
140, 724	Muschert, B. F., Morrisville, Pa. Cultivator.....	July 8, 1873	338	114	4	47
144, 858	Musgrave, J., Cincinnati, Ohio. Carbureter.....	Nov. 25, 1873	609	207	4	561
143, 176	Musgrove, W. E., Fair Play, Colo. Ter. Machine for clearing streets of snow.....	Sept. 23, 1873	743	256	4	335
134, 697	Müsser, F., Cincinnati, Ohio. Hinge.....	Jan. 7, 1873	187	61	3	21
144, 628	Mustin, J. G., Pittsburgh, Pa. Chimney-tool for glass-blowers.....	Nov. 18, 1873	400	134	4	534
145, 004	Muzzey, D., Saint Albans, Vt. Car axle-box.....	Nov. 25, 1873	724	244	4	571
137, 471	Myer, V. E. (See Myer, C. T. and V. E.)..... (Design)					
143, 708	Myers, A., Salem, Oreg. Metallic case for turbine-wheels.....	Apr. 1, 1873	173	55	3	371
	Myers, B., Chicago, Ill. Railway-rail.....	Oct. 14, 1873	291	95	4	412

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
145, 361	Myers, C., Marysville, Cal., assignor to self and F. J. Schaeffer, Davenport, Iowa. Sub-soil gang-plow.	Dec. 9, 1873	291	98	4	621
	Myers, D. (See Spenser, P. I., assignor.)					
138, 515	Myers, D., Chicago, Ill. Pipe-coupling.	May 6, 1873	44	15	3	501
143, 177	Myers, D. B., assignor of one-half interest to C. D. Helwig, Uhricksville, Ohio. Washing-machine.	Sept. 23, 1873	743	256	4	335
136, 334	Myers, D. E., Logansport, Ind. Mechanism for transmitting power.	Feb. 25, 1873	869	280	3	233
138, 920	Myers, E., Jersey City, N. J. Car-spring.	May 13, 1873	407	128	3	541
144, 559	Myers, E., assignor to A. W. Thompson, New York, N. Y. Rotary-engine.	Nov. 11, 1873	335	113	4	517
136, 612	Myers, F., New York, N. Y. Sad-iron.	Mar. 11, 1873	244	82	3	274
136, 613	Same. Sad and embossing irons combined.	Mar. 11, 1873	244	83	3	274
140, 427	Myers, G. A., Williamsburgh, N. Y. Portable and adjustable hoisting apparatus.	July 1, 1873	70	25	4	14
136, 855	Myers, H., Highland, Kans. Washing-machine.	Mar. 18, 1873	460	152	3	301
141, 660	Myers, J., Jersey City, N. J. Steering apparatus.	Aug. 12, 1873	235	74	4	162
	Myers, J. B. (See Bennor, J., assignor.)					
	Myers, J. B., et al. (See Bennor, J., assignor.)					
	Same. (See Bennor, J., assignor.) (Reissue.)					
135, 833	Myers, M. D., Schuyler, N. Y. Holdback.	Feb. 11, 1873	413	134	3	171
138, 681	Myers, M. N., Boston, Mass. Cap.	May 6, 1873	190	61	3	513
141, 374	Myers, R. W., New York, N. Y. Seat or back of chairs.	July 29, 1873	974	316	4	123
137, 561	Myers, W. H., Philadelphia, Pa. Chimney-cowl.	Apr. 8, 1873	263	81	3	390
143, 178	Myers, W. H., Oregon, assignor of one-half interest to B. F. Perry, Madison, Wis. Potato-bug destroyer.	Sept. 23, 1873	744	257	4	335
	Nagney, J. C. (See McCandlish & Nagney.)					
139, 601	Nagle, A. F., Providence, R. I. Draftsman's ruling-gage.	June 3, 1873	136	45	3	620
137, 382	Nagle, I. E., New Orleans, La. Nut-lock.	Apr. 1, 1873	91	30	3	364
142, 500	Nahle, H., Brooklyn, N. Y. Street-lamp.	Sept. 2, 1873	161	52	4	255
139, 806	Nance, J. W., and D. Lillard, Cornersville, Tenn. Combination mill-pick.	June 10, 1873	345	107	3	652
143, 633	Naramore, E. M., Underhill, Vt. Mop-holder.	Oct. 14, 1873	217	73	4	407
	Naramore, J. W., Derby, Conn. Pin-sticking machine. (Extension.)	July 5, 1873			4	7
145, 070	Nardin, U., Locle, Switzerland. Stem winding and setting watch.	Dec. 2, 1873	28	9	4	587
142, 716	Nash, D. R., Brooklyn, N. Y. Furnace for producing malleable iron.	Sept. 9, 1873	349	118	4	282
141, 513	Nash, S., Cambridge, Mass. Elevator for passengers and freight.	Aug. 5, 1873	91	28	4	142
141, 375	Nason, C. O., assignor to Deere & Co., Moline, Ill. Plow.	July 29, 1873	974	316	4	123
	National Horseshoe Nail Company. (See Ross, R., assignor.)					
	National Horseshoe Nail Company. (See Ross, R., assignor.)					
	National Screw Company. (See Pierce & Ayres, assignors.)					
	National Tube Works Company. (See Flagler, H. K., assignor.)					
	Same. (See Jones, D., assignor.)					
	National Water-Wheel Company. (See Case, J. T., assignor.)					
	Same. (See Gray, H., assignor.)					
	National Wire-Mattress Company. (See Turnbull, A., assignor.)					
	Same. (See Turnbull & Webb, assignors.) (Reissue.)					
142, 717	Nation, D. H. (See Little & Nation.)					
138, 682	Nation, D. H., Saint Louis, Mo. Reservoir cooking-stove.	Sept. 9, 1873	351	118	4	282
142, 931	Nation, D. H., and E. C. Little, Saint Louis, Mo. Reservoir cooking-stove.	May 6, 1873	191	61	3	513
142, 932	Same. same.	Sept. 16, 1873	540	184	4	308
142, 933	Same. same.	Sept. 16, 1873	540	184	4	308
142, 934	Same. same.	Sept. 16, 1873	541	184	4	309
142, 935	Same. same.	Sept. 16, 1873	543	185	4	309
136, 534	Same. Cooking-stove. same.	Sept. 16, 1873	544	185	4	309
141, 454	Naylor, H., Oil City, Pa. Bottle and bottle-stopper.	Mar. 4, 1873	164	52	3	258
141, 162	Naylor, J. H., Buffalo, N. Y. Check-valve.	Aug. 5, 1873	39	13	4	138
142, 265	Naylor, S., Independence, Iowa. Lantern.	July 22, 1873	757	249	4	98
	Naylor, S., and A. Fairchild, Independence, Iowa. Lamp-wick trimmer.	Aug. 26, 1873	790	261	4	226
	Naylor, W. (See McGinnis & Naylor.)					
144, 351	Naylor, W., Mildmay Park, England. Car-brake.	Nov. 4, 1873	148	50	4	490
136, 256	Nealey, J., Jr., and T. P. Kemp, Bangor, Me. Elastic check-rein.	Feb. 25, 1873	800	260	3	228
144, 281	Nearn, M. L., Double Bridges, Tenn. Cotton chopper and cultivator.	Nov. 4, 1873	93	31	4	485
135, 355	Neat, A. E., New Albany, Ind. Revolving-sieve.	Jan. 28, 1873	804	260	3	112
138, 516	Nebinger, G. R., Philadelphia, Pa. Fruit-dryer.	May 6, 1873	45	15	3	501
143, 296	Neckerman, M., Pittsburgh, Pa. Taper-turning attachment to lathes.	Sept. 30, 1873	855	293	4	360
140, 528	Needham, E. P., New York, N. Y. Key for piano-fortes, organs, &c.	July 1, 1873	160	54	4	21
143, 924	Neff, G. S., Rochester, N. Y. Filter.	Oct. 21, 1873	492	166	4	438
145, 585	Neff, J., Dallastown, Pa. Tree-protector.	Dec. 16, 1873	498	164	4	650
135, 575	Neideffer, W., Mitchell, Ind. Sawing-machine.	Feb. 4, 1873	168	54	3	141
146, 015	Neidig, D. A., Paris, Ohio. Farm-gate.	Dec. 30, 1873	904	293	4	705
140, 529	Neil, J. R., Wolcottville, Conn. Liquid-cooler.	July 1, 1873	160	55	4	21
134, 608	Neil, J. W., Brooklyn, assignor to self, E. Simpson, Glen Cove, and J. W. Wilson, New York, N. Y. Bayonet attachment.	Jan. 7, 1873	103	33	3	15
138, 517	Neil, W., San Francisco, Cal. Condenser and refiner for spirituous liquors.	May 6, 1873	46	16	3	501
143, 179	Neill, J. E., deceased, by U. U. Neill, administrator, Key West, Fla. Hemp-machine.	Sept. 23, 1873	745	257	4	335
	Neill, U. U., administratrix. (See Neill, J. E.)					
145, 963	Neill, W. J., assignor of one-half interest to R. D. Mason, Lawrence, Kans. Spring-shank for boots and shoes.	Dec. 30, 1873	860	279	4	701
145, 586	Neilson, J. F., New York, N. Y. Water-closet.	Dec. 16, 1873	499	164	4	650
	Neligh, J. (See Seislove, J., assignor.)					
	Nellis, A. (See Mitchel, O. M., assignor.)					
143, 775	Nellis, A. J., Pittsburgh, Pa. Horse hay-rake.	Oct. 21, 1873	368	122	4	428
144, 282	Nelson, A. S., assignor of one-half interest to H. F. Hammon, Conneautville, Pa. Slide valve.	Nov. 4, 1873	93	31	4	485
134, 559	Nelson, C., Gloucester, Mass. Solution for preserving canvas and cordage.	Jan. 7, 1873	55		3	11
136, 000	Nelson, C., East New York, N. Y. Torpedo.	Feb. 18, 1873	565	186	3	198
	Nelson, C. P. (See Ball, A., assignor.)					
142, 718	Nelson, D. A., Tyler, Tex., assignor of one-third interest to S. D. Wood. Hay and cotton press.	Sept. 9, 1873	351	118	4	282
142, 501	Nelson, E. H., Gainesville, Ala. Cotton-cultivator.	Sept. 2, 1873	162	52	4	255
	Nelson, G. F., et al. (See Clarkson, F. E., assignor.)					
139, 729	Nelson, H., New York, N. Y. Paint compounds.	June 10, 1873	272		3	647
	Nelson, La Tourette, & Co. (See Jones, W., assignor.)					
142, 936	Nelson, S. W., Worcester, Mass. Planing-machine.	Sept. 16, 1873	545	185	4	309
142, 266	Nelson, W. C., Kentland, Ind. Windmill.	Aug. 26, 1873	791	261	4	226
136, 535	Nemetz, L., New York, N. Y. Billiard-cue.	Mar. 4, 1873	165	53	3	258
144, 919	Nemmers, M. P., Saint Donatus, Iowa. Hand corn-planter.	Nov. 25, 1873	653	222	4	565
138, 096	Neracher, W., Cleveland, Ohio. Fire-proof floor and chimney connection.	Apr. 22, 1873	757	240	3	452

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 272	Neracher, W., Cleveland, Ohio. Key-fastener.....	Apr. 29, 1873	938	296	3	475
145, 005	Nes, C. M., York, Pa. Manufacture of steel.....	Nov. 25, 1873	725		4	572
5, 309	Nesbitt, J., East Boston, Mass., assignor to W. G. Ulery. Slide-valve..... (Reissue)	Mar. 4, 1873	211	70	3	262
5, 310	Same..... Slide-valve for steam-engines..... (Reissue)	Mar. 4, 1873	212	70	3	262
135, 931	Nesbitt, J. D., Foxborough, Mass. Cushion and sharpener for sewing-machine needles..	Feb. 18, 1873	508	165	3	193
143, 527	Nesmith, G. W., Metamora, Ill. Grain-register.....	Oct. 7, 1873	109	38	4	389
138, 180	Nettleton, J. F., Branford, Conn. Device for capping and uncapping cartridges.....	Apr. 22, 1873	828	263	3	458
145, 893	Neuber, C. F., New Brunswick, and F. W. Perry, Camden, N. J., assignors to J. L. Mason, New Brunswick, N. J. Machine for forming screw-threads on sheet-metal.....	Dec. 23, 1873	774	253	4	684
136, 750	Nevers, W., Bridgeton, Me. Sled.....	Mar. 11, 1873	360	119	3	283
136, 751	Nevill, G. W., Richmond, Va. Drain-tile-laying apparatus.....	Mar. 11, 1873	361	119	3	283
136, 752	Same..... Ditching-machine.....	Mar. 11, 1873	362	119	3	283
138, 428	Neville, J., Jersey City, N. J., assignor of one-half interest to T. Holihan, Chicago, Ill. Furnace for smelting ores.....	Apr. 29, 1873	1,077	340	3	486
138, 429	Same..... Combined rotary blast and puddling furnaces for making wrought iron direct from the ore.....	Apr. 29, 1873	1,078	340	3	486
	Neville, R. (See Smith, T., assignor.).....					
	New Brunswick Carpet Company. (See Webster, A. T., assignor)..... (Design.)					
	New England Glass Company. (See Libbey, W. L., assignor)..... (Design.)					
	Same..... (See Lydiatt, J., assignor.).....					
	Same..... (See Wing, J., assignor.).....					
	New Era Organ Company. (See Smith, J. A., assignor.).....					
	New York Ottoman and Hassock Company. (See Ladd, J. D., assignor)..... (Design.)					
143, 836	Newcomb, S. H., Port Williams, Nova Scotia. Standard for stools, tables, &c.....	Oct. 21, 1873	422	141	4	433
143, 993	Newcomb, W., Baltimore, Md., assignor of one-half interest to N. W. Allen, Boston, Mass. Windlass.....	Oct. 28, 1873	578	192	4	456
138, 518	Newell, A., Erie, Pa. Mode of constructing wooden pulley-wheels.....	May 6, 1873	47	16	3	501
	Newell, F. A. (See Bucklin, E., jr., assignor.).....					
145, 521	Newell, J. A., Kalamazoo, Mich. Machine for boring hubs.....	Dec. 16, 1873	455	145	4	645
141, 231	Newell, J. L., Port Huron, Mich. Compound for mixing paints.....	July 29, 1873	836	.....	4	112
140, 530	Newell, R., assignor to R. Newell & Son, Philadelphia, Pa. Compound for coating wood and other articles to render them acid-proof.....	July 1, 1873	161	.....	4	21
	Newell, R. & Son. (See Newell, R., assignor.).....					
145, 811	Newhouse, A. S., Hamburg, S. C. Sofa, chair, &c.....	Dec. 23, 1873	701	230	4	678
145, 583	Newlin, J. W., and J. S. Simmerman, Millville, N. J. Station-indicator.....	Dec. 16, 1873	497	163	4	650
140, 428	Newman, E. G., and P. Anderson, New York, N. Y. Piano-action.....	July 1, 1873	71	25	4	14
136, 933	Newman, J., and N. Brown, Rossville, Ill. Bee-hive.....	Mar. 18, 1873	524	173	3	305
	Newman, L. (See Montgomery, L., assignor.).....					
145, 678	Newman, T., New Orleans, La. Railway-switch.....	Dec. 16, 1873	578	189	4	656
	Newman, W. (See Happe & Newman.).....					
137, 792	Newsham, W. L., assignor to Morris Tasker & Co., Philadelphia, Pa. Machine for bending tube-sockets.....	Apr. 15, 1873	477	149	3	420
143, 371	Newson, G. S., Edgefield, Tenn. Washing-machine.....	Sept. 30, 1873	926	314	4	366
144, 123	Newton, A. D., New York, N. Y. Bit-stock.....	Oct. 28, 1873	686	227	4	464
5, 365	Newton, F. W., South Orange, N. J., assignor by mesne assignment to W. L. Pomeroy } and J. F. Plummer. Lappet-loom..... (Reissue) }	Apr. 22, 1873	871	{ 276 } { 277 }	{ 3 }	461
	Newton, G. S. (See Donald & Newton.).....					
137, 021	Newton, G. W., Hubbard, Ohio. Cattle-guard for railways.....	Mar. 18, 1873	600	199	3	312
141, 661	Newton, I., Cleveland, Ohio. Carriage-bolt.....	Aug. 12, 1873	236	74	4	162
	Newton, J. (See Hall & Newton.).....					
140, 216	Newton, J. H., Paxton, Ill. Mop-wringer.....	June 24, 1873	724	228	3	699
141, 809	Newton, J. M., Dayton, Ky., assignor to D. D. Martin and J. English. Hand-press for jelly.	Aug. 12, 1873	367	120	4	173
	Newton, N. C. (See Kempe, E., assignor.).....					
138, 574	Newton, R., Millville, N. J. Can-filler.....	May 6, 1873	96	31	3	505
6, 437	Ney, E. J., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet.....	Feb. 18, 1873	.....	.....	3	189
6, 438	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 439	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 440	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 441	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 442	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 443	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 444	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 445	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 446	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 447	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 448	Same..... (Design).....	Feb. 18, 1873	.....	.....	3	189
6, 529	Same..... (Design).....	Mar. 25, 1873	.....	.....	3	325
6, 530	Same..... (Design).....	Mar. 25, 1873	.....	.....	3	325
6, 531	Same..... (Design).....	Mar. 25, 1873	.....	.....	3	325
6, 532	Same..... (Design).....	Mar. 25, 1873	.....	.....	3	325
6, 606	Same..... (Design).....	Apr. 22, 1873	.....	.....	3	444
6, 607	Same..... (Design).....	Apr. 22, 1873	.....	.....	3	444
6, 938	Same..... (Design).....	Oct. 7, 1873	.....	.....	4	380
6, 939	Same..... (Design).....	Oct. 7, 1873	.....	.....	4	380
6, 940	Same..... (Design).....	Oct. 7, 1873	.....	.....	4	380
6, 941	Same..... (Design).....	Oct. 7, 1873	.....	.....	4	380
7, 038	Same..... (Design).....	Dec. 9, 1873	.....	.....	4	614
7, 039	Same..... (Design).....	Dec. 9, 1873	.....	.....	4	614
7, 040	Same..... (Design).....	Dec. 9, 1873	.....	.....	4	614
7, 041	Same..... (Design).....	Dec. 9, 1873	.....	.....	4	614
7, 042	Same..... (Design).....	Dec. 9, 1873	.....	.....	4	614
7, 043	Same..... (Design).....	Dec. 9, 1873	.....	.....	4	614
136, 753	Nézeraux, P., Paris, France. Apparatus for cooling air.....	Mar. 11, 1873	363	120	3	283
	Nicholas, J. (See Bradley & Nicholas.).....					
	Same..... (Reissue).....					
	Nicholl, Burr & Co. (See Hinzey, J., assignor.).....					
145, 964	Nicholls, J. A., Pittsburgh, Pa. Valve.....	Dec. 30, 1873	861	279	4	701
	Nichols, A. J. (See Farrell, F., assignor.).....					
137, 022	Nichols, A. T., Williamsport, Pa. Sawing-machine.....	Mar. 18, 1873	601	199	3	312
141, 163	Same..... same.....	July 22, 1873	758	249	4	98
141, 810	Nichols, B. T., Roselle, N. J. Nail.....	Aug. 12, 1873	367	120	4	173
145, 006	Nichols, C. W., assignor to H. H. Frary, Chicago, Ill. Safety-strap for harness.....	Nov. 25, 1873	726	245	4	572
136, 934	Nichols, F., New London, Conn. Acid-pump.....	Mar. 18, 1873	525	173	3	305
143, 994	Nichols, F. W., Lynn, Mass. Shutter-worker.....	Oct. 28, 1873	580	193	4	456

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137, 562	Nichols, G. C., Binghamton, N. Y. Modes of connecting cement, water, and gas pipes...	Apr. 8, 1873	264	81	3	390
143, 372	Nichols, H. W. and R. P., Northfield, Ind. Portable fence...	Sept. 30, 1873	927	314	4	366
136, 754	Nichols, J., and E. D. Brown, said Brown assignor to said Nichols, Battle Creek, Mich. Horse-power	Mar. 11, 1873	364	120	3	283
145, 362	Nichols, J. H., La Fayette, Ill. Gate-fastener	Dec. 9, 1873	292	98	4	621
	Nichols, J. J. (See Delkescamp, A., assignor.)					
	Same.....same.....(Reissue.)					
136, 257	Nichols, J. R., Bastrop, Tex. Plow	Feb. 25, 1873	800	260	3	228
	Nichols, J. S., et al. (See Waterhouse, A. G., assignor.)					
	Nichols, M., et al. (See Waterhouse, A. G., assignor.)					
144, 409	Nichols, M. O., Clyde, O. Reed-organ reed	Nov. 11, 1873	207	70	4	507
144, 473	Nichols, M. V., Osage, Iowa. Vehicle	Nov. 11, 1873	260	88	4	511
	Nichols, R. P. (See Nichols, H. W. & R. P.)					
137, 793	Nichols, W. D., Batavia, Ill. Windmill	Apr. 15, 1873	477	150	3	420
139, 473	Same.....same.....	June 3, 1873	27	8	3	611
	Nichols, W. E. (See Hastings, Nichols & Merriett.)					
135, 242	Nichols, W. H., East Hampton, Conn. Lock-nut	Jan. 28, 1873	707	226	3	104
142, 719	Nickerson, A., East Somerville, Mass. Adjustable spray-jet	Sept. 9, 1873	352	119	4	282
	Nickerson, B. F. (See Huntley, A. D., assignor.)					
142, 267	Nicoll, D., London, England. Rendering fabrics unflammable	Aug. 26, 1873	791		4	226
139, 258	Nicoll, R. G., and G. H. Hollman, Hazlehurst, Miss. Reciprocating steam-engine	May 27, 1873	737	233	3	588
142, 039	Niderkom, G., West Mount Vernon, N. Y. Self-reclining chair	Aug. 19, 1873	581	191	4	199
139, 602	Niemann, F. H., Cincinnati, Ohio. Combined step-cover and wheel-fender	June 3, 1873	137	45	3	620
	Niemann, H. T. (See Gory, E. G., assignor.)					
	Niles, H. E. (See Chapman, A. G., assignor.)					
144, 410	Nilson, N., assignor to self and W. W. McNair, Minneapolis, Minn. Steam-brake for railway-cars	Nov. 11, 1873	208	70	4	507
144, 352	Nimmo, E. B., Brooklyn, assignor to Shepard & Dudley, New York, N. Y. Cannula point for syringes	Nov. 4, 1873	150	50	4	490
	Nimocks, A. H. (See Lang, C., assignor.)					
136, 451	Nisbett, C. A., Pontiac, Mich. Fire-kindler	Mar. 4, 1873	84	29	3	252
135, 282	Nissle, A., and J. Schöberl, New York, N. Y. Rocking-chair fan	Jan. 28, 1873	739	238	3	107
137, 563	Nitkey, J., Minneapolis, Minn. Corn-planter	Apr. 8, 1873	264	82	3	390
5, 353	Nittinger, A., jr., Philadelphia, Pa. Oscillating steam-engine	Apr. 15, 1873	653	205	3	435
141, 164	Nix, M. L., Chetopah, Kans. Harvester-rake	July 22, 1873	758	249	4	98
144, 784	Nixon, C. H., Polo, Ill. Cotton-planter	Nov. 18, 1873	530	180	4	544
143, 709	Nixon, F. M., and E. N. Babcock, Lena, Ill. Washing-machine	Oct. 14, 1873	292	96	4	412
5, 289	Noah, G. G., Boston, Mass. Machine and process for making paste	Feb. 18, 1873	684	221	3	206
138, 519	Noah, G. G., Charlestown, Mass. Apparatus for making paste	May 6, 1873	48	16	3	501
5, 619	Nobel, A., Hamburg, Germany, assignor by mesne assignment to the Giant Powder Company, San Francisco, Cal. Explosive compound	Oct. 21, 1873	523		4	441
5, 620	Nobel, A., Hamburg, Germany, assignor by mesne assignment to the Atlantic Giant Powder Company, San Francisco, Cal. Exploding nitro-glycerine	Oct. 21, 1873	525	175	4	441
5, 621	Same.....Method of exploding nitro-glycerine	Oct. 21, 1873	527	175	4	441
141, 455	Nobel, A., Hamburg, Germany, assignor to the Giant Powder Company and the Atlantic Giant Powder Company, San Francisco, Cal. Explosive compound	Aug. 5, 1873	40		4	138
	Noble, A. U., et al. (See Algeo, R. J., assignor.)					
	Noble, C., & Co. (See Coppuck, M. M., assignor.)					
	Same.....(See Martino, J., assignor.)					
	Noble, J. (See Sweet & Noble.)					
137, 318	Noble, S. D., Cerro Gordo, Ill. Ditching and grading machine	Apr. 1, 1873	36	11	3	360
143, 026	Noble, O. W., assignor to self and J. W. Harnden, Wakefield, Mass. Sash-fastener	Sept. 23, 1873	626	213	4	325
137, 472	Nobles, M. V., Elmira, N. Y. Sanding device for locomotives	Apr. 1, 1873	174	55	3	371
135, 283	Noe, C. L., Bergen Point, N. J. Angling-reel	Jan. 28, 1873	740	238	3	107
	Noel, T., Memphis, Tenn. Spectacle-frame	Jan. 11, 1873			3	7
137, 146	Nolan, J., Waddington, N. Y. Water-wheel	Mar. 25, 1873	720	239	3	333
135, 146	Nolan, K., assignor of one-half interest to B. Ryan, Galesburgh, Ill. Double-acting pump	Jan. 21, 1873	597	194	3	83
141, 456	Nolan, P. W., New York, N. Y., assignor of one-half interest to J. H. Campbell, Williamantic, Conn. Folding-chair	Aug. 5, 1873	41	13	4	138
141, 457	Same.....same.....	Aug. 5, 1873	43	13	4	138
145, 229	Nolan, P. W., New York, N. Y. Car-seat	Dec. 2, 1873	172	59	4	599
	Nolan, T. (See McGinty & Nolan.)					
142, 502	Nolf, A. L., assignor to self and V. Barjon, New York, N. Y. Galvanic battery	Sept. 2, 1873	163	53	4	255
6, 959	Noly, V. (See Cavalli, A., assignor.)					
6, 995	Nonnenbacher, J., New York, N. Y. Picture-frame, &c	Oct. 14, 1873			4	401
	Same.....same.....	Nov. 11, 1873			4	505
	Noon, J. & J. (See Conger, W. M., assignor.)					
141, 811	Norden, L., Philadelphia, Pa. Reefing fore and aft sails	Aug. 12, 1873	368	121	4	173
6, 449	Nordmann, H., New York, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	Feb. 18, 1873			3	189
6, 450	Same.....same.....	Feb. 18, 1873			3	189
6, 533	Same.....same.....	Mar. 25, 1873			3	325
6, 608	Same.....same.....	Apr. 22, 1873			3	444
7, 044	Same.....same.....	Dec. 9, 1873			4	615
7, 045	Same.....same.....	Dec. 9, 1873			4	615
	Norfleet, T. (See Darrell, A. M., assignor.)					
144, 218	Norfolk, J. R., Salem, Mass. Shuttle-actuating mechanism for looms	Nov. 4, 1873	43	13	4	481
139, 182	Norman, G. A., Baltimore, Md. Animal-trap	May 20, 1873	656	205	3	574
135, 576	Norman, H., and C. F. Dietrich, New Orleans, La. Ice-machine	Feb. 4, 1873	169	54, 55	3	141
136, 258	Same.....Pump	Feb. 25, 1873	801	260	3	228
136, 259	Same.....Air-engine	Feb. 25, 1873	802	260	3	228
141, 585	Norrbin, J. H., and J. Ohlsson, assignors to A. Liedbeck, Stockholm, Sweden. Explosive compound	Aug. 5, 1873	149		4	147
145, 120	Norris, J. B., Richmond, Va. Plow	Dec. 2, 1873	74	23	4	591
145, 812	Same.....Lubricating compound	Dec. 23, 1873	702		4	678
	Norris, L., et al. (See Bisbing & McCune, assignors.)					
	North American Iron-Works. (See Wilkinson, W. H., assignor.)					
	North British Rubber Company. (See Bartlett, W. E., assignor.)					
140, 531	North, O. B., assignor to O. B. North & Co., New Haven, Conn. Snap-hook	July 1, 1873	161	55	4	21
143, 180	Same.....Harness-buckle	Sept. 23, 1873	746	258	4	335
	North, O. B., & Co. (See North, O. B., assignor.)					
	Northend & Foster. (See Benner, L. D., assignor.)					
143, 373	Northrup, C. W., Utica, N. Y. Spring bed-bottom	Sept. 30, 1873	928	314	4	366
138, 520	Northup, N. G., Saint Paul, Minn. Joint for sheathing	May 6, 1873	49	16	3	501

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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5, 557	Norton, C. P., Prairie City, Iowa, assignor to I. P. Pillsbury, Monmouth, Ill. Cultiva- tor (Reissue) ..	Aug. 26, 1873	850	280	4	231
134, 816	Norton, E., Boston, Mass. Washing-machine	Jan. 14, 1873	299	96	3	44
139, 688	Norton, E., Chicago, Ill. Box for spices, &c	June 10, 1873	228	73	3	643
	Norton, E. D. (See Stoddard & Norton.)					
	Norton, F. P., et al. (See De Forest, D. W., assignor.)					
136, 526	Norton, H. B., Rochester, N. Y. Potato-digger	Mar. 4, 1873	165	53, 54	3	258
134, 923	Norton, J. D., Saint Louis, Mo. Soldering-iron	Jan. 14, 1873	394	125	3	52
	Norton, M. P., Troy, N. Y. Post-marking stamp	Aug. 9, 1873			4	134
	Norton, S. S., et al. (See De Forest, D. W., assignor.)					
	Norwalk Lock Company. (See Elwell, H. H., assignor.)					
	Norwood, C. J., et al. (See Manning, J., assignor.)					
136, 173	Noton, W., Oldham, England, assignor to R. Kiston, Lowell, Mass. Feed-mechanism for cotton-openers, &c	Feb. 25, 1873	733	236	3	222
135, 005	Nott, A. B., assignor of one-half interest to J. E. Card, Fairhaven, Mass. Farmer's boiler	Jan. 21, 1873	480	154	3	74
5, 248	Nourse, L. S., Barre, Mass., assignor to H. A. Hildreth and W. J. Johnson. Flour-sifter. (Reissue) ..	Jan. 21, 1873	644	209	3	87
	Nourse, T., et al. (See Arndt, A. F. R., assignor.)					
	Same (See Cliff & Martin, assignors.)					
	Novelty Iron Works Manufacturing Company. (See Presbrey, C. H., assignor.)					
136, 935	Nowlan, S. B. B., New York, N. Y. Construction of bridges	Mar. 18, 1873	526	{ 173 174 }	{ 3 4 }	306
142, 809	Noye, J. T., Buffalo, N. Y. Tramming-bolt for grinding-mills	Sept. 16, 1873	441	{ 148 149 }	{ 4 5 }	300
135, 834	Noyes, B. B., and O. G. Stratton, Greenfield, Mass. Dash-rail for carriages	Feb. 11, 1873	414	134	3	171
5, 348	Noyes, C. H., Orange, N. J. Band-comb	Apr. 8, 1873	438	135	3	404
136, 756	Noyes, D. W., Bennington, Vt. Railway-car ventilator	Mar. 11, 1873	365	121	3	284
138, 921	Same Window-sash	May 13, 1873	408	128	3	541
	Noyes, H. H., et al. (See Root, J. B., assignor)					
143, 027	Noyes, J. P., Binghamton, N. Y. Sewing-machine	Sept. 23, 1873	627	{ 213 214 }	{ 4 5 }	326
141, 885	Noyes, P., Lowell, Mass. Apparatus for oiling, testing, and washing fire-engine hose....	Aug. 19, 1873	449	146	4	188
	Nugent, E. (See Fanning & Nugent.)					
144, 693	Nugent, E., and J. Fanning, Brooklyn, N. Y. Machine for nicking and shaving screw- blanks	Nov. 18, 1873	456	154	4	538
145, 121	Same Machine for threading screw-blanks	Dec. 2, 1873	75	24	4	591
143, 092	Null, W. H., Blandinsville, Ill. Quilting-attachment for sewing-machines	Sept. 23, 1873	680	234	4	330
134, 924	Nunamaker, S., Nineveh, Pa. Railway-rail joint	Jan. 14, 1873	394	125	3	52
140, 636	Nuss, G., New York, N. Y. Combined refrigerator and beer-cooler	July 8, 1873	267	91	4	41
	Nutrio Manufacturing Company. (See Fitts, R. B., assignor)					
	Nuttall, W. (See Isherwood & Nuttall.)					
	Nutter, G. T. (See Miller, A., assignor.)					
	Nutting, G. (See Tebbets & Nutting.)					
140, 637	Nutting, G. E., and J. C. Githens, assignors to A. C. Rand, New York, N. Y. Rock-drill..	July 8, 1873	268	91	4	41
135, 932	Nye, S. R., assignor to self and C. J. Rice, Winchendon, Mass. Grain-drill	Feb. 18, 1873	508	166	3	193
143, 837	Oakes, B. F., Milford, Me. Car-starter	Oct. 21, 1873	423	141	4	433
136, 614	Oakes, E., Danville, Ill. Reed-organ	Mar. 11, 1873	245	83	3	274
135, 284	Oakes, F. S., Cattaraugus, N. Y. Milk-cooler	Jan. 28, 1873	740	238	3	107
138, 273	Oakley, F. L., New York, N. Y. Mitten	Apr. 29, 1873	939	296	3	475
137, 232	Oakley, J. S., Passaic, N. J. Tucker for sewing-machines	Mar. 25, 1873	801	264	3	338
139, 183	Oakley, J. S., and B. M. Post, Passaic, N. J. Step-ladder	May 20, 1873	657	205	3	574
	Oakley, J. T. (See Jaques, Oakley & Sterne.)					
	Oaks, J. B. (See Burnham & Oaks)					
	Oaks, S. D. (See Gould, M. B., assignor.)					
141, 070	Oaks, W. A. C., Reading, Pa. Apple-parer	July 22, 1873	669	225	4	91
135, 006	Ober, P. E., Beverly, Mass. Coffin	Jan. 21, 1873	481	154	3	74
137, 233	Oberndorf, A., jr., Baltimore, Md. Umbrella-handle	Mar. 25, 1873	802	264	3	339
144, 124	Same Toy building-block	Oct. 28, 1873	687	227	4	465
145, 522	O'Brien, A. W., New York, N. Y. Step-ladder	Dec. 16, 1873	455	145	4	645
139, 259	O'Brien, C. M., Hightstown, N. J. Tag-machine	May 27, 1873	737	{ 233 234 }	{ 3 4 }	588
139, 416	O'Brien, J., assignor to self and C. D. Lamarche, New York, N. Y. Fire-escape	May 27, 1873	878	281	3	599
	O'Brien, W. S. (See Dale, W., assignor)					
139, 326	Obrist, W., New York, N. Y. Ribbon-block	May 27, 1873	795	253	3	593
140, 299	O'Bryan, B., Marietta, Pa. Belt shifter and tightener	June 24, 1873	793	252	3	705
137, 947	Oburg, F. V., Peoria, Ill. Thread-cutter for sewing-machines	Apr. 15, 1873	605	191	3	431
141, 945	O'Callahan, T., Boston, Mass. Metallic lathing	Aug. 19, 1873	496	163	4	192
139, 807	Ochiltree, S. P., Orange, Ind., assignor of one-half interest to G. H. Punttenney. Rotary- engine	June 10, 1873	346	107	3	652
	Ockington, A. J. (See Ockington, B. B. & A. J.)					
145, 587	Ockington, B. B. & A. J., Stratford Hollow, N. H. Machine for making clothes-pins....	Dec. 16, 1873	500	164	4	650
143, 776	O'Conner, J., Jackson, Mo. Wheel for vehicles	Oct. 21, 1873	369	122	4	428
143, 838	O'Conner, L. J., Chicago, Ill. Street-sweeping machine	Oct. 21, 1873	423	141	4	433
137, 709	O'Conner, T., assignor to Saint Louis Rail-Fastening Company, Saint Louis, Mo. Spike- machine	Apr. 8, 1873	392	122	3	400
137, 948	O'Connor, W., Berville, Mich. Extension-ladder	Apr. 15, 1873	606	191	3	431
142, 503	O'Connor, M., New Brunswick, N. J. Fruit-can	Sept. 2, 1873	163	53	4	255
139, 730	Ocorr, H., Milwaukee, Wis. Stool or chair	June 10, 1873	273	85	3	647
137, 234	O'Dell, A., Bucyrus, Ohio. Washing-machine	Mar. 25, 1873	803	265	3	339
145, 306	Odell, S. W., Saint Louis, Mo. Copying and folding press	Dec. 9, 1873	244	82	4	617
135, 724	Odell, T. L., and J. C. Hudson, Iowa Falls, Iowa. Bed-bottom	Feb. 11, 1873	314	100	3	164
	Odenatt, W. H. (See Kichner & Odenatt.)					
136, 001	Odgers, C. E., Bloomfield, N. J. Machine for cutting stone	Feb. 18, 1873	566	{ 186 187 }	{ 3 4 }	198
143, 297	Odiorne, D. W., Elizabeth, N. J. Umbrella-cover	Sept. 30, 1873	856	293	4	360
138, 430	O'Donnell, J., Saint Louis, Mo. Hat	Apr. 29, 1873	1, 079	340	3	486
143, 777	O'Donnell, J. D., Washington, D. C. Draft-cock for soda-water and other liquids....	Oct. 21, 1873	370	122	4	428
140, 429	O'Donoghue, J. D., and W., New York, N. Y. Tooth-brush	July 1, 1873	72	26	4	14
	O'Donoghue, W. (See O'Donoghue, J. D. & W.)					
6, 589	Oesterle, H. A., Philadelphia, Pa. Badge	Apr. 15, 1873			3	417
6, 383	Oesterling, J., Wheeling, W. Va. Beer-mug	Feb. 4, 1873			3	127
143, 778	Same Manufacture of stemmed glass-ware	Oct. 21, 1873	372	123	4	429
145, 122	Offen, G. C., Portland, Me. Safety-attachment for car-trucks	Dec. 2, 1873	77	24	4	591
	Olfermann, E. (See Ambrun & Olfermann.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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134, 560	O'Gara, T., Worcester, Mass. Slating-nail.....	Jan. 7, 1873	55	17	3	11
	Ogborn, H., <i>et al.</i> (See Estell, S. F., assignor.)					
135, 725	Ogborn, H., Richmond, Ind., and A. W. Kendrick, Brooklyn, N. Y. Bed-bottom.....	Feb. 11, 1873	414	100	3	164
135, 835	Same.....same.....	Feb. 11, 1873	415	135	3	171
135, 933	Same.....same.....	Feb. 18, 1873	509	166	3	193
136, 174	Same.....Broadcast-seeder.....	Feb. 25, 1873	734	236	3	223
136, 382	Same.....Bed-bottom.....	Mar. 4, 1873	28	10	3	247
136, 665	Same.....Spring for bed-bottoms.....	Mar. 11, 1873	290	97	3	278
140, 430	Ogborn, H., Richmond, assignor of one-half interest to S. Watson, Indianapolis, Ind. Staple for securing the ends of barrel-hoops.....	July 1, 1873	73	26	4	14
144, 920	Ogborn, H., Richmond, assignor of one-half interest to S. Watson, Lewisville, Ind. Barrel-hoop.....	Nov. 25, 1873	654	222	4	565
	Ogden, H. M. (See Smith & Ogden.)					
	Ogden, Milstead & Co. (See Jenkins, G. E., assignor.)					
140, 300	Ogden, R. C., New York, N. Y. Calendar-catch.....	June 24, 1873	793	252	3	705
138, 575	Oglesby, T. B., Hempstead, Tex. Teeth for cotton-gin saw.....	May 6, 1873	97	31	3	505
137, 235	O'Grady, D., Charleston, Ill. Swinging-crib or hammock.....	Mar. 25, 1873	804	265	3	339
142, 810	O'Haire, J. A., assignor of one-half interest to W. A. Jones, West Troy, N. Y. Operating car-doors.....	Sept. 16, 1873	441	149	4	300
139, 968	O'Hara, C. M., Fall River, Mass. Covering for steam and other pipes.....	June 17, 1873	488	154	3	671
	Ohlsson, J. (See Norrbin & Ohlsson.)					
136, 856	Ohmer, A. J., Hamilton, Ohio. Dish-cover.....	Mar. 18, 1873	460	153	3	301
141, 232	Ojeda, A. V., San Francisco, Cal. Hydraulic jack.....	July 29, 1873	837	273	4	112
	O'Kemp, C., <i>et al.</i> (See La Grove, W. A. P., assignor.)					
141, 233	Okerlund, S. P., Omaha, Neb. Apparatus for lowering pipes in wells.....	July 29, 1873	838	273	4	112
	Okey, J. M. (See Devol & Okey.)					
137, 383	Olander, A., Glen Gardner, N. J., and A. Olander, New York, N. Y. Window-mirror.....	Apr. 1, 1873	91	30	3	364
143, 839	Olbert, G. W., and W. Young, Barr's Store, Ill. Automatic gate.....	Oct. 21, 1873	424	141	4	433
140, 638	Oldham, C. W., Leipsic, Ind. Door-spring.....	July 8, 1873	269	91	4	41
134, 609	Olds, A. M., Greeley, Col. Ter. Washing-machine.....	Jan. 7, 1873	104	34	3	15
137, 473	Same.....Wash-tub holder.....	Apr. 1, 1873	175	56	3	371
137, 949	Olds, A. W., Green Oak Station, Mich. Portable fence.....	Apr. 15, 1873	607	191	3	431
138, 756	Olds, H. D., assignor of two-thirds interest to C. J. Bayer. Cedar Rapids, Iowa. Bedstead.....	May 13, 1873	270	83	3	529
136, 002	Olds, H. H., New Haven, Conn. Pulp-strainer.....	Feb. 18, 1873	567	187	3	198
	Oleomargarine Manufacturing Company. (See Paraf, A., assignor.)					
	Olin, E. D. (See Daly, W. F., assignor.)					
142, 172	Olin, G. S., Deer Lodge, Mont. Ter. Stamp-mill for ores.....	Aug. 26, 1873	712	236	4	219
145, 813	Same.....Mechanism for towing boats.....	Dec. 23, 1873	703	231	4	678
136, 936	Oliver, B. A., assignor to self and A. M. Cox, Bunker Hill, Ill. Excavator.....	Mar. 18, 1873	527	{ 174 175 }	{ 3 3 }	{ 306 306 }
135, 836	Oliver, C. P., assignor of one-half interest to T. P. Howell, Newark, N. J. Leather-stretching frame.....	Feb. 11, 1873	416	135	3	172
136, 757	Oliver, D. B., McClure Township, Pa. Blank for draw-bolts.....	Mar. 11, 1873	366	121	3	284
136, 090	Oliver, H. N., Rahway, N. J. Raising piano-forte lids.....	Feb. 18, 1873	643	210	3	203
136, 857	Oliver, H. W., jr., Pittsburgh, Pa. Manufacture of rub-iron for carriages.....	Mar. 18, 1873	461	153	3	301
5, 321	Oliver, J., South Bend, Ind. Chill for casting mold-boards.....(Reissue).....	Mar. 11, 1873	412	136	3	287
142, 347	Oliver, J., Toronto, Canada. Preserving and drying lumber.....	Sept. 2, 1873	21	8	4	244
144, 785	Oliver, J., South Bend, Ind. Plow.....	Nov. 18, 1873	531	181	4	544
142, 578	Oliver, W., Haynesville, La. Mechanical movement.....	Sept. 9, 1873	238	77	4	273
142, 504	Olmsted, L. B., Brooklyn, N. Y. Mode of regulating speed in machinery.....	Sept. 2, 1873	164	53	4	255
139, 603	Olney, G. W., Lincoln, R. I. Speeder.....	June 3, 1873	138	45	3	620
141, 886	Olney, J. B., Brooklyn, N. Y. Gas apparatus for railway-cars.....	Aug. 19, 1873	449	146	4	189
142, 173	Olney, S. P., Detroit, Mich. Machine for gumming saws.....	Aug. 26, 1873	713	236	4	219
142, 937	Olsen, T., assignor to Riehlé Bros., Philadelphia, Pa. Apparatus for testing the tensile strength of metals.....	Sept. 16, 1873	547	186	4	309
143, 995	Olsson, S. J., Chicago, Ill. Waste cock for outlet-valves.....	Oct. 28, 1873	580	193	4	456
140, 156	Olsson, S. J., Chicago, Ill. Governor for steam-heating apparatus.....	June 24, 1873	674	212	3	694
138, 683	Omensetter, E., and J. F. Parker, Philadelphia, Pa. Compound tool.....	May 6, 1873	192	61	3	513
145, 523	Omensetter, R. L., Philadelphia, Pa. Combined latch and door-check.....	Dec. 16, 1873	446	146	4	645
6, 451	O'Neil, J., assignor to self and R. A. Schoneman, New York, N. Y. Sewing-machine frame.....(Design).....	Feb. 18, 1873	.....	.....	3	189
137, 618	Same.....Sewing-machine.....	Apr. 8, 1873	310	96	3	394
144, 474	O'Neil, J., New York, N. Y. Means for propelling vessels.....	Nov. 11, 1873	261	88	4	511
139, 417	O'Neill, E. V., assignor to self, J. Kelly, and R. Pilkington, Philadelphia, Pa. Reversible rotary cutter.....	May 27, 1873	879	282	3	600
	O'Neill, E. W., <i>et al.</i> See Palmer, H. L., assignor.....(Reissue).....					
145, 588	O'Neill, J., Brooklyn, N. Y. Car-mat.....	Dec. 16, 1873	501	165	4	650
137, 794	O'Neill, P. H., Saint Louis, Mo. Horseshoe-attachment.....	Apr. 15, 1873	479	150	3	420
135, 934	Onion, J. H. W., and W. H. H. Larduskey, assignors of one-third interest to W. D. F. Larkin, Baltimore, Md. Machine for cutting saw-teeth.....	Feb. 18, 1873	510	166	3	193
	Oppenheimer, S. (See Hamm, S., assignor.)					
143, 458	Oram, J. M., Gosport, Ind. Watchmaker's lathe.....	Oct. 7, 1873	51	18	4	385
141, 724	Orcutt, H., Amherst, Wis. Door-fastener.....	Aug. 12, 1873	287	94	4	166
138, 521	Ord, W., Brooklyn, Ohio. Governor for steam-engines.....	May 6, 1873	49	17	3	501
	Ordway, A., <i>et al.</i> (See Dustin, J. E., assignor.)					
138, 757	Ordway, A. H., Haverhill, Mass. Spring for rocking-chairs.....	May 13, 1873	270	84	3	529
139, 808	Ormsbee, M., Brooklyn, N. Y. Button-fastening.....	June 10, 1873	346	107	3	652
141, 287	Orndorff, J. S., Virginia City, Nev. Pen-holder.....	July 29, 1873	886	290	4	116
144, 694	Orput, J. M., Malta, assignor of one-half interest to H. Safford, South Grove, Ill. Draw-bar in draft-equalizers for wagons.....	Nov. 18, 1873	457	155	4	538
144, 695	Same.....Clip for wagon-axle skeins.....	Nov. 18, 1873	457	155	4	538
144, 696	Orr, G. J., New York, N. Y. Distributer for extinguishing fires.....	Nov. 18, 1873	458	155	4	538
135, 285	Orr, G. J., and C. E. Gildersleeve, New York, N. Y. Hose-bridge.....	Jan. 28, 1873	741	239	3	107
141, 071	Orr, J. C., and J. M. Baird, Wheeling, W. Va. Leg for furniture.....	July 22, 1873	670	225	4	91
	Orr, Painter & Co. (See Painter, J. R., assignor.)					
	Orr, R. J. (See Welsh & Orr.)					
144, 560	Orr, T. M., and A. R. Sears, North Bridgewater, assignors of one-half interest to C. A. Pratt, Clinton, Mass. Jack-center for edge-trimming, and burnishing machines.....	Nov. 11, 1873	336	113	4	517
142, 505	Orr, W. J., Charlotte, N. C. Cotton-bale tie.....	Sept. 2, 1873	165	53	4	255
144, 353	Orton, B. E., and W. Cavert, Sterling, Ill. Shaft-hanger.....	Nov. 4, 1873	151	50	4	490
	Orton, G. V. (See Roche & Orton.)					
6, 830	Orton, T., Chicago, Ill. Paper-clip.....(Design).....	Aug. 26, 1873	.....	.....	4	212
136, 666	Same.....Combined letter-sheet and envelope.....	Mar. 11, 1873	291	97	3	278
139, 019	Same.....Paper-clip.....	May 20, 1873	504	158	3	562
145, 230	Same.....Bill and paper file.....	Dec. 2, 1873	173	60	4	599

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 283	Orum, M. L. (<i>See Mellor & Orum.</i>)					
139, 418	Orum, M. L., Philadelphia, Pa. Match-box.....	Nov. 4, 1873	94	31	4	486
138, 922	Orvis, A., Ellington, Ill. Flood-fence.....	May 27, 1873	880	282	3	600
137, 090	Orwig, S. H., Philadelphia, Pa. Type-setting machine.....	May 13, 1873	409	129	3	541
139, 020	Osborn, J. H., Guelph, Canada. Treadle.....	Mar. 25, 1873	674	224	3	329
144, 125	Osborn, M., Albion, Mich. Cane.....	May 20, 1873	504	159	3	562
139, 515	Osborn, O., Cleveland, Ohio. Wrecking-apparatus.....	Oct. 28, 1873	688	228	4	365
142, 579	Osborn, O. S., New Haven, Conn. Landau carriage-hook.....	June 3, 1873	62	21	3	614
	Osborn, S. (<i>See Smith & Osborn.</i>)					
	Osborn, W. F., Burlington, Kans. Wagon-brake.....	Sept. 9, 1873	238	78	4	273
	Osborne, D. M. (<i>See Kirby, W. A., assignor.</i>)					
	Osborne, D. M., & Co. (<i>See Meyer, F., assignor.</i>)					
	Osborne, E. W. (<i>See Patterson, A. J., assignor.</i>)					
139, 184	Osborne, J. W., Washington, D. C. Speed-gage.....	May 20, 1873	658	{ 206 207 }	{ 3 3 }	{ 574 574 }
140, 068	Osborne, O., assignor to T. Dolan & Co., Philadelphia, Pa. Pressing hosiery.....	June 17, 1873	578	183	3	679
138, 274	Osenbrück, J. A., Hemenlingen, Germany. Lubricator.....	Apr. 29, 1873	940	297	3	475
135, 577	Osgood, C. M., Amherst, Mass. Device for pressing hats.....	Feb. 4, 1873	173	55	3	141
137, 474	Osgood, F., New York, N. Y. Manufacture of pigments containing zinc and lead.....	Apr. 1, 1873	176	.....	3	371
138, 684	Same.....Manufacture of oxide of zinc for pigments.....	May 6, 1873	193	.....	3	513
138, 685	Same.....Treating zinc dross and skimmings for the manufacture of pigments.....	May 6, 1873	193	.....	3	513
	Osgood, J. M. (<i>See Sprague & Osgood.</i>)					
143, 247	Osgood, R. R., Troy, N. Y. Mode of fastening the racks of dredging-machine dipper-handles.....	Sept. 30, 1873	813	279	4	357
143, 418	Osmond, E., Cincinnati, Ohio. Device for retaining fillings in teeth.....	Oct. 7, 1873	22	8	4	382
143, 925	Ostrander, J. S., Dayton, Ohio. Paper-bag machine.....	Oct. 21, 1873	493	{ 166 167 }	{ 4 4 }	{ 439 439 }
	Ostrom, H. P., et al. (<i>See Hermance, J. F., assignor.</i>)					
134, 698	Otis, C. R., Yonkers, N. Y. Guide for elevators.....	Jan. 7, 1873	188	61	3	21
146, 090	Same.....Hoisting-apparatus.....	Dec. 30, 1873	968	{ 312 313 }	{ 4 4 }	{ 710 710 }
134, 699	Otis, C. R. and N. P., Yonkers, N. Y. Steam hoisting-apparatus.....	Jan. 7, 1873	189	61	3	21
145, 747	Otis, E., assignor to J. Peckham, New Haven, Conn. Machine for making cord.....	Dec. 23, 1873	649	213	4	674
	Otis, M. E. (<i>See Otis, M. S. and M. E.</i>)					
144, 354	Otis, M. S. and M. E., Rochester, N. Y. Wood-grinder for paper-pulp.....	Nov. 4, 1873	152	50	4	491
	Otis, N. P. (<i>See Otis, C. R. and N. P.</i>)					
143, 459	Otis, S. A., Boston, Mass. Car-coupling.....	Oct. 7, 1873	52	18	4	355
5, 263	Ottstot, J. D., Springfield, Ohio. Lifting-jack.....	Jan. 28, 1873	849	273	3	116
137, 859	Ott, A., assignor to T. F. Wells, New York, N. Y. Artificial stone.....	Apr. 15, 1873	534	.....	3	425
144, 921	Ottenheimer, J., assignor to Ottenheimer, Rothschild & Co., New York, N. Y. Woven corset.....	Nov. 25, 1873	655	222	4	565
	Ottenheimer, Rothschild & Co. (<i>See Ottenheimer, J., assignor.</i>)					
	Ottner, J. (<i>See Rebstock & Ottner.</i>)					
	Same.....same.....(Reissue.)					
138, 758	Ottner, J., Bridgeport, Conn. Manufacture of door-knobs.....	May 13, 1873	271	84	3	529
	Otto, F. G., et al. (<i>See Leiter, J., assignor.</i>)					
145, 123	Otto, N. A., Deutz, Germany. Caloric-engine.....	Dec. 2, 1873	77	25	4	591
	Ough, W. (<i>See Bellairs & Ough.</i>)					
136, 003	Ough, W., Orion, Ill. Sulky-plow.....	Feb. 18, 1873	567	187	3	198
137, 950	Oутten, G. F., Norfolk, Va. Mortising-machine.....	Apr. 15, 1873	608	191	3	431
	Oттerson, W. P. (<i>See Keely, N., assignor.</i>)					
136, 091	Overend, J. A. T., San Francisco, Cal. Type-casting machine.....	Feb. 18, 1873	643	211	3	203
143, 374	Overend, W., Cincinnati, Ohio, assignor to E. and C. Chambers, jr., Philadelphia, Pa. Register-point perforating device.....	Sept. 30, 1873	929	314	4	366
135, 837	Overholser, A. W., Duchoyquet Township, Ohio. Portable extension fence.....	Feb. 11, 1873	417	135	3	172
142, 862	Overton, E., Utica, N. Y. Water-wheel.....	Sept. 16, 1873	483	165	4	303
137, 619	Owen, C. N., Salem, Ohio. Door and gate spring.....	Apr. 8, 1873	310	97	3	394
138, 275	Owen, D. J., Springville, Pa. Animal-trap.....	Apr. 29, 1873	942	297	3	475
135, 661	Owen, D. J., and J. G. Brydges, Springville, Pa. Broom-head.....	Feb. 11, 1873	258	82	3	160
136, 335	Same.....Washing-machine.....	Feb. 25, 1873	870	280	3	233
	Owen, F. N. (<i>See Baker, Doney & Owen.</i>)					
	Owen, J. D. (<i>See Duncan, S., assignor.</i>)					
	Same.....(<i>See Pomeroy & Owen.</i>)					
145, 007	Owen, S. R., Stewartville, Mo. Earth-boring machine.....	Nov. 25, 1873	727	245	4	572
145, 894	Owen, W. S., Oskaloosa, Iowa. Reaming-machine.....	Dec. 23, 1873	776	253	4	684
145, 895	Same.....Lining for pump-cylinders.....	Dec. 23, 1873	777	254	4	684
	Owens, C. L. (<i>See Gash & Owens.</i>)					
142, 644	Owens, J. L., Cambria, Wis. Harvester-rake.....	Sept. 9, 1873	289	95	4	277
139, 185	Owens, T. B., Gatesville, Tex. Medical compound or bitters for treating chills and fever.....	May 20, 1873	660	.....	3	574
143, 587	Owens, T. D., Pittsburgh, Pa. Stone-pavement.....	Oct. 14, 1873	176	60	4	403
144, 859	Pacand, E. J., assignor to F. A. Jones, Schaffhausen, Switzerland. Stem winding and setting watch.....	Nov. 25, 1873	610	207	4	561
144, 860	Packard, C., Eureka, Nev., and S. Standish, Pacheco, Cal. Fly-trap.....	Nov. 25, 1873	610	{ 207 208 }	{ 4 4 }	{ 561 561 }
143, 926	Packard, D. H., North Bridgewater, Mass. Apparatus for molding box-toes for boots and shoes.....	Oct. 21, 1873	494	167	4	439
139, 186	Packard, G. L., Everett, Mass. Combined refrigerator and sideboard.....	May 20, 1873	660	207	3	574
140, 381	Packard, I. T., Fort Wayne, Ind. Reed-organ stop-action.....	July 1, 1873	39	13	4	11
134, 817	Packard, R. G., Brooklyn, N. Y. Dredger.....	Jan. 14, 1873	300	97	3	44
134, 764	Paddock, O., Watertown, N. Y. Match-box.....	Jan. 14, 1873	252	82	3	41
142, 408	Paddock, S. E., Delaware, Ohio. Medical compound.....	Sept. 2, 1873	77	.....	4	248
5, 438	Paddon, J. B., Troy, Ill. Rewinnowing attachment for thrashers.....	June 3, 1873	187	60	3	624
137, 710	Paden, S. K., Pulaski, Pa., assignor to self and R. V. Pierce, Buffalo, N. Y. Nail-plate feeder.....	Apr. 8, 1873	393	122	3	400
136, 175	Padon, J. B., Troy, Ill. Rewinnowing attachment for thrashers.....	Feb. 25, 1873	735	237	3	223
139, 969	Paff, J., Lawrenceburgh, Pa. Binder for loaded wagons and sleighs.....	June 17, 1873	489	154	3	671
140, 431	Pagan, J., Yonkers, N. Y. Shirt-bosom.....	July 1, 1873	73	26	4	14
5, 223	Page, A. H., assignor by mesne assignment to the Metropolitan Washing-Machine Company, Manchester, N. H. Clothes-wringer.....	Jan. 7, 1873	213	68	3	23
5, 224	Same.....same.....(Reissue.)	Jan. 7, 1873	214	69	3	24
5, 225	Same.....same.....(Reissue.)	Jan. 7, 1873	215	69	3	24
	Page, A. W. (<i>See Bullard, J. H., assignor.</i>)					
141, 165	Page, C., Meriden, Conn. Adjustable car-window stop.....	July 22, 1873	759	250	4	98
146, 091	Page, S. N., Lamar Mills, Pa. Washing-machine.....	Dec. 30, 1873	970	313	4	710
	Page, W. H., & Co. (<i>See Page, W. H., assignor.</i>)					

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7, 072	Page, W. H., assignor to W. H. Page & Co., Norwich, Conn. Printing-type.... (Design)...	Dec. 23, 1873			4	671
7, 073	Same..... (Design).....	Dec. 23, 1873	.....	.....	4	671
7, 074	Same..... (Design).....	Dec. 23, 1873	.....	.....	4	671
141, 376	Paige, D. O., Detroit, Mich. Fire-proof safe.....	July 29, 1873	975	317	4	123
142, 506	Paige, J. C., Stoneham, Mass. Manufacture of horseshoe-nails.....	Sept. 2, 1873	166	54	4	255
141, 011	Paige, W. H., assignor of one-half interest to S. T. Hammond, Springfield, Mass. Rail-way-car wheel.....	July 22, 1873	619	209	4	87
5, 565	Pailca, J., Ledyard, N. Y. Tire-setter..... (Reissue)...	Sept. 9, 1873	390	130	4	285
141, 662	Paine, G. C., Boston, Mass. Reclining-chair.....	Aug. 12, 1873	237	75	4	162
	Paine, H. J., <i>et al.</i> (See Lord, T., assignor.)					
139, 327	Paine, J. F., assignor by mesne assignment of one-half interest to R. Morrow, Providence, R. I. Shoe-nail.....	May 27, 1873	795	.....	3	593
142, 863	Paine, N., Milford, Mass. Machine for forming the hooks of machine-needles.....	Sept. 16, 1873	483	165	4	303
136, 336	Paine, S. W., Rochester, N. Y. Shot-cartridge.....	Feb. 25, 1873	871	281	3	233
141, 586	Painter, J. R., Reading, Pa., assignor to Orr, Painter & Co. Magazine for stoves.....	Aug. 5, 1873	150	48	4	147
141, 587	Painter, W., assignor of one-half interest to L. R. Keizer, Baltimore, Md. Pump-valve ..	Aug. 5, 1873	150	48	4	147
	Palfry, W. (See Swett, C., assignor.)					
143, 375	Palm, T. F., assignor to I. H. Hampton and T. F. Palm, Toledo, Ohio. Eave-trough hanger.	Sept. 30, 1873	929	315	4	366
142, 645	Palmberg, A. J., Boston, Mass. Ironing-table.....	Sept. 9, 1873	290	95	4	277
143, 460	Palmberg, A. J., assignor to C. S. Hicks, Boston, Mass. Shutter-fastening.....	Oct. 7, 1873	52	18	4	385
137, 711	Palmer, B. F., Philadelphia, Pa. Artificial leg.....	Apr. 8, 1873	394	122	3	400
	Palmer, C. (See Palmer, G. & C.)					
	Palmer, C. B. (See Hinden, M. J., assignor.)					
135, 243	Palmer, C. H., New York, N. Y. Machine for pressing and shaping cigar-fillers.....	Jan. 28, 1873	707	227	3	104
135, 662	Palmer, C. H., assignor to the Pamphlet-Stitching-Machine Company, New York, N. Y. Machine for sewing books.....	Feb. 11, 1873	258	82	3	160
136, 452	Palmer, C. H., New York, N. Y., assignor to A. M. Loryea, Portland City, Oreg. Water-wheel attachment for sewing-machines.....	Mar. 4, 1873	84	29	3	252
136, 615	Palmer, C. H., New York, N. Y. Cigar-mold.....	Mar. 11, 1873	246	83	3	274
139, 516	Same..... Blind-slat staple.....	June 3, 1873	63	21	3	614
145, 814	Same..... Sewing-machine.....	Dec. 23, 1873	704	{ 231 } { 232 }	4	679
139, 474	Palmer, C. W., Cleveland, Ohio. Brush.....	June 3, 1873	27	8	3	611
139, 913	Same..... Reed-organ.....	June 17, 1873	447	139	3	668
140, 725	Same..... Portfolio.....	July 8, 1873	339	115	4	47
138, 923	Palmer, F. G., assignor to self and J. J. Palmer, Pittsburgh, Pa. Vapor-burner.....	May 13, 1873	411	129	3	541
140, 157	Palmer, F. H., Whitefield, N. H. Adjustable saw-guide.....	June 24, 1873	675	212	3	694
144, 561	Palmer, G. & C., Morris Run, Pa. Life-preserving cape.....	Nov. 11, 1873	337	113	4	517
139, 731	Palmer, G. H., Monmouth, Ill. Knapsack.....	June 10, 1873	274	86	3	647
139, 604	Palmer, G. N., assignor to H. A. Lyon and L. E. St. John, Greene, N. Y. Endless-chain for animal-power.....	June 3, 1873	139	45	3	620
134, 700	Palmer, H., Barnesville, Ohio. Chimney-top.....	Jan. 7, 1873	190	61	3	22
146, 016	Palmer, H. A., Hingham, and A. H. Spencer, Boston, assignors to J. J. Haley, Newton, and H. C. Morse, Boston, Mass. Carpet-sweeper.....	Dec. 30, 1873	905	293	4	705
5, 471	Palmer, H. L., Stillwater, N. Y., assignor to E. W. O'Neill and M. Fitzgibbons. Apparatus for the manufacture of pasteboard..... (Reissue)...	July 1, 1873	199	66	4	24
5, 562	Palmer, H. L., assignor of one-half interest to C. C. Skilton, New York, N. Y. Non-conducting tablet, platform, or mat..... (Reissue)...	Sept. 2, 1873	206	67	4	258
134, 765	Palmer, H. L., New York, N. Y. Hot-water heating-apparatus for ranges.....	Jan. 14, 1873	253	83	3	41
135, 356	Same..... Heating and cooking range.....	Jan. 28, 1873	804	260	3	112
135, 838	Same..... Hot-air furnace.....	Feb. 11, 1873	417	135	3	172
136, 755	Same..... Stove-pipe.....	Mar. 11, 1873	365	121	3	283
141, 812	Palmer, H. L., assignor of one-half interest to C. C. Skilton, New York, N. Y. Non-conducting-tablet, platform, or mat.....	Aug. 12, 1873	369	121	4	173
	Palmer, I. E., Hackensack, N. J. Tackle-block..... (Extension)...	Nov. 1, 1873	.....	.....	4	452
143, 376	Same..... Coil-holder for wire, &c.....	Sept. 30, 1873	930	315	4	366
5, 381	Palmer, J., Concord, N. H. Power-hammer..... (Reissue)...	Apr. 29, 1873	1, 113	352	3	489
137, 951	Palmer, J., Cincinnati, Ohio. Spring-hinge.....	Apr. 15, 1873	609	192	3	431
143, 461	Palmer, J., Sandisfield, Mass. Means for forcing ashes from vessels.....	Oct. 7, 1873	53	19	4	385
	Palmer, J. J. (See Palmer, F. G., assignor.)					
	Palmer, J. S., Providence, R. I. Rolling metal for jewelry..... (Extension)...	June 14, 1873	.....	.....	3	640
5, 571	Same..... Bracelet..... (Reissue)...	Sept. 9, 1873	397	133	4	286
140, 947	Palmer, J. W., Pana, Ill. Table-hinge.....	July 15, 1873	546	183	4	72
	Palmer, Knox & Co. (See Knox, R. F., assignor.)					
135, 244	Palmer, N., Athens, assignor to Davis Wheel and Palmer Fork Company, New York, N. Y. Wheel for vehicles.....	Jan. 28, 1873	709	227	3	105
139, 517	Palmer, N. W., New York, N. Y. Cigar-drying mold.....	June 3, 1873	63	21	3	614
5, 608	Palmieri, H., New York, N. Y., assignor of one-half interest to G. Monges. Stationary fire-pipe for buildings..... (Reissue)...	Oct. 14, 1873	333	111	4	415
136, 537	Palmieri, H., Philadelphia, Pa. Stationary fire-pipe for buildings.....	Mar. 4, 1873	168	54	3	259
	Palser, J. B., Aiken, S. C., and G. Howland, Troy, N. Y. Apparatus for the manufacture of paper-pulp..... (Extension)...	June 21, 1873	.....	.....	3	662
	Same..... Manufacture of paper-pulp..... (Extension)...	June 21, 1873	.....	.....	3	662
	Same..... Preparation of straw for paper-pulp..... (Extension)...	June 21, 1873	.....	.....	3	662
24, 484	Palser, J. B., Aiken, S. C., and G. Howland, Mechanicsville, N. Y. Apparatus for the manufacture of paper-pulp..... (Disclaimer filed)...	June 20, 1873	.....	.....	4	477
24, 484	Same..... Apparatus for the manufacture of paper-pulp..... (Disclaimer filed)...	June 20, 1873	.....	.....	4	478
	Pamphlet-Stitching-Machine Company. (See Palmer, C. H., assignor.)					
136, 453	Pancoast, H. B., and F. I. Maule, Philadelphia, Pa. Sectional steam-boiler.....	Mar. 4, 1873	85	29	3	252
135, 578	Panton, H., New York, N. Y. Treating tin-scrap and obtaining useful products.....	Feb. 4, 1873	173	55	3	141
137, 712	Same..... Recovering tin from waste-tin scrap.....	Apr. 8, 1873	396	123	3	401
137, 319	Panyard, A., Massillon, Ohio. Portable earth-closet.....	Apr. 1, 1873	37	12	3	360
137, 952	Paquette, N., Summerfield, assignor of one-half interest to N. Davis, Ida, Mich. Machine for cutting leather.....	Apr. 15, 1873	610	192	3	431
137, 564	Paraf, A., New York, N. Y., assignor to Oleomargarine Manufacturing Company. Purifying and separating fats.....	Apr. 8, 1873	265	.....	3	390
143, 634	Pardee, R. S., San Diego, Cal. Apparatus for compressing air.....	Oct. 14, 1873	217	73	4	407
136, 667	Pardee, J., Worcester, Mass. Furnace for heating iron bars, &c.....	Mar. 11, 1873	292	97	3	278
135, 579	Parham, C., Philadelphia, Pa. Feeding-mechanism for sewing-machines.....	Feb. 4, 1873	176	55	3	141
144, 284	Parham, S. P., New York, N. Y. Composition for purifying illuminating-gas.....	Nov. 4, 1873	94	.....	4	486
141, 288	Parish, J. W., McFarland's, Va. Machine for dressing millstones.....	July 29, 1873	886	291	4	116
139, 076	Park, A. R., Columbia, Tex. Turning-lathe for wood.....	May 20, 1873	558	175	3	566
	Park, C. (See Hazeltine & Park.)					
144, 219	Park, F., Deerfield, Mass., assignor to self, H. A. Axtell, and F. B. Kervan. Hammock-support.....	Nov. 4, 1873	44	13	4	481

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 565	Park, J. B., North Platte, Nebr. Windmill.....	Apr. 8, 1873	266	82	3	390
138, 924	Park, J. E., La Vergne, Tenn. Manufacture of cement.....	May 13, 1873	412		3	541
5, 579	Park, J. K., Marlborough, N. Y., assignor by mesne assignment to the American Basket Company, New Britain, Conn. Fruit-basket..... (Reissue.)	Sept. 23, 1873	782	269	4	338
136, 858	Park, L., Brady, Pa. Window-blind.....	Mar. 18, 1873	462	153	3	301
134, 766	Park, W., Norwich, Conn. Mechanical-movement.....	Jan. 14, 1873	254	83	3	41
142, 174	Parke, I., Mineral Point, Mo. Automatic fire-escape for safes.....	Aug. 26, 1873	714	236	4	220
143, 635	Parke, I. S., Virginia City, Nev. Amalgamating-pan.....	Oct. 14, 1873	218	73	4	407
	Parker and Whipple Company. (See Jennings, C. S., assignor.)					
	Parker, C. (See Bishop, J., assignor.)					
	Same..... (See Dorsett, F., sr., assignor.)					
	Same..... (See Fosket, W., assignor.)					
	Same..... (See Gaines, L. J., assignor.)					
	Same..... (See McGraw, G. V., assignor.)					
	Same..... (See Parker, J., assignor.)					
	Same..... (See Porter, H. K. and T. W., assignors)..... (Reissue.)					
	Same..... (See Raub, J. L., assignor.)					
138, 813	Parker, C., Wenona, Ill. Fire-proof roofing.....	May 13, 1873	319	98	3	534
145, 231	Parker, C. C., Kiddville, Mo. Lubricating device for vehicle-axles.....	Dec. 2, 1873	174	60	4	599
	Parker, E. (See Spencer & Parker.)					
135, 147	Parker, E., assignor to the Russell and Erwin Manufacturing Company, New Britain, Conn. Knob-latch.....	Jan. 21, 1873	597	.....	3	83
139, 077	Parker, E., New Britain, Conn. Wire mattress.....	May 20, 1873	560	175	3	566
142, 720	Parker, E., Chambersburgh, Pa. Drawing-knife.....	Sept. 9, 1873	353	119	4	282
138, 686	Parker, E. A., West Meriden, Conn. Ice-pitcher.....	May 6, 1873	194	61	3	513
137, 091	Parker, F. A., Gardner, Mass. Tilting-chair.....	Mar. 25, 1873	675	224	3	329
144, 697	Parker, G., Poughkeepsie, N. Y. Middlings-purifier.....	Nov. 18, 1873	459	155	4	538
140, 726	Parker, G. C., Worcester, Mass. Mode of siding boot-legs.....	July 8, 1873	339	115	4	47
145, 589	Same..... Boot.....	Dec. 16, 1873	502	165	4	650
140, 069	Parker, G. E., Newark, N. J., assignor to M. Slater, New York, N. Y. Musical wind-instrument.....	June 17, 1873	578	183	3	679
138, 522	Parker, G. W., Gardner, Mass. Speed-regulator.....	May 6, 1873	50	17	3	501
142, 580	Parker, G. W., assignor of one-half interest to C. L. Poorman, Bellaire, Ohio. Vegetable cutter.....	Sept. 9, 1873	239	78	4	273
145, 748	Parker, H., Gananoque, Canada. Device for forming cores.....	Dec. 23, 1873	650	213	4	674
141, 813	Parker, J., Pontiac, assignor of one-half interest to J. A. Hubbs, Cato, Mich. Draft-equalizer.....	Aug. 12, 1873	369	121	4	173
144, 126	Parker, J., assignor to C. Parker, Meriden, Conn. Shutter-fastening.....	Oct. 28, 1873	689	228	4	465
144, 786	Parker, J., Pontiac, assignor of one-half interest to J. A. Hubbs, Cato, Michigan. Whiffle-tree.....	Nov. 18, 1873	531	181	4	544
5, 296	Parker, J., and I. Cook, San Francisco, Cal., said Parker assignor of one-half interest to S. P. Taylor. Hydraulic telescopic-platform elevator..... (Reissue.)	Feb. 25, 1873	892	287	3	235
	Parker, J. F. (See Omensetter & Parker.)					
137, 795	Parker, L., Davenport, Iowa. Rotary steam-engine.....	Apr. 15, 1873	479	150	3	420
	Parker, O. M. (See West & Parker.)					
134, 701	Parker, R. M. C., Memphis, Tenn. Car-frame.....	Jan. 7, 1873	190	62	3	22
138, 097	Parker, R. R., Indianapolis, Ind. Neck-tie.....	Apr. 22, 1873	758	241	3	452
	Parker, W., et al. (See Rodier & Bates, assignors.)					
142, 268	Parker, W., assignor of one-half interest to A. Corse, Rolla, Mo. Washing-machine.....	Aug. 26, 1873	792	261	4	226
140, 532	Parker, W. F., Meriden, Conn. Pigeon-trap.....	July 1, 1873	162	55	4	21
135, 726	Parker, W. T., Verona, Miss. Cultivator.....	Feb. 11, 1873	315	100	3	164
139, 021	Parker, W. W., Minneapolis, Minn. Folding-seat.....	May 20, 1873	505	159	3	562
	Parker, White & Co. (See White, H. K., assignor.)					
137, 384	Parkhurst, A. G., Appleton, Wis. Machine for cutting hoops.....	Apr. 1, 1873	92	30	3	364
143, 298	Parkhurst, D. L., San Francisco, Cal. Mechanical key and sounder for telegraphs.....	Sept. 30, 1873	857	293	4	360
139, 022	Parkhurst, J. H., Saint Louis, Mo. Thill-coupling.....	May 20, 1873	506	159	3	562
145, 679	Parkinson, J. C., Vineland, N. J. Medical inhaler.....	Dec. 16, 1873	578	190	4	656
6, 664	Parks, J. W., assignor to T. Dolan & Co., Philadelphia, Pa. Stocking fabric (Design).....	May 20, 1873	.....	.....	3	585
144, 127	Parkman, H., Philadelphia, Pa. Hoe.....	Oct. 28, 1873	690	229	4	465
138, 759	Parlow, D., Philadelphia, Pa. Medical compound or blood-purifier.....	May 13, 1873	272	.....	3	529
145, 232	Parmelee, H. C., and S. M. Johns, assignors of one-third interest to C. D. Everett, Cleveland, Ohio. Spark-arrester.....	Dec. 2, 1873	175	60	4	599
	Parmelee, A. A. (See Parmelee, W. J., assignor.)					
146, 092	Parmelee, D. D., New York, assignor to C. Runyon, Yonkers, and F. Robinson, New York, N. Y. Working scrap-iron or other metals into ingots.....	Dec. 30, 1873	971	314	4	710
143, 377	Parmelee, L., assignor to self and M. Hine, New Haven, Conn. Drill-chuck.....	Sept. 30, 1873	930	315	4	366
144, 128	Same..... Chuck.....	Oct. 28, 1873	690	229	4	465
137, 475	Parmelee, W. J., assignor to A. A. Parmelee, Fort Plain, N. Y. Manufacture of carriage axle-boxes.....	Apr. 1, 1873	177	56	3	371
	Parmenter, Z., et al. (See Howard, A. F., assignor.)					
140, 432	Parmentier, E., Clifton, Ill. Corn-planter.....	July 1, 1873	74	26	4	14
145, 965	Parmiter, B., and W. Bradley, Morgan County, Ohio. Vehicle.....	Dec. 30, 1873	862	280	4	701
135, 007	Parr, F. C. G., Carter's Creek Station, Tenn. Sawing-machine.....	Jan. 21, 1873	481	154	3	74
135, 357	Parr, S. E., Smithville, Ill. Gang-plow.....	Jan. 28, 1873	806	260	3	112
135, 286	Parry, J., Manchester, Great Britain. Furniture-caster.....	Jan. 28, 1873	742	239	3	107
137, 953	Parsell, D., Saundersfoot, Wales. Steam-generator.....	Apr. 15, 1873	610	192	3	431
143, 779	Parsons, N. J., Cortland, N. Y. Washing-machine.....	Oct. 21, 1873	373	123	4	429
142, 721	Parsons, W., assignor of one-half interest to W. B. Brown, Palmyra, N. Y. Buckle.....	Sept. 9, 1873	353	119	4	282
136, 454	Same..... Check-loop for harness.....	Mar. 4, 1873	86	29	3	252
142, 409	Parsons, W. W., Stanstead, Canada. Fire-escape ladder.....	Sept. 2, 1873	78	25	4	248
146, 017	Same..... Saw-filing machine.....	Dec. 30, 1873	906	293	4	705
135, 358	Partello, C., Watertown, N. Y. Sash-holder.....	Jan. 28, 1873	807	260	3	112
141, 289	Partridge, A., Springfield, Mass. Wrench.....	July 29, 1873	867	291	4	116
	Partridge, A. H. (See Balcom, H., assignor.)					
135, 440	Partridge, B. F., Syracuse, N. Y. Cupboard and extension-table combined.....	Feb. 4, 1873	44	13	3	131
139, 078	Partz, A. F. W., Oakland, Cal. Manufacture of sugar.....	May 20, 1873	560	.....	3	566
	Parvis, A. (See Davidsen & Parvis.)					
142, 348	Passé, E., Fort Wayne, Ind. Universal joiner.....	Sept. 2, 1873	23	8, 9	4	244
	Passoz, A. L. (See Wilkinson, Passoz, Lafargue & Dutrich.)					
135, 245	Pasteur, L., Paris, France. Brewing beer and ale.....	Jan. 28, 1873	710	227	3	105
141, 072	Same..... Manufacture of beer and yeast.....	July 22, 1873	671	225	4	91
	Patchen, R. M. (See Colvin & Patchen.)					
139, 732	Paterson, G., Waynesborough, Ga. Cotton-planter.....	June 10, 1873	276	86	3	647
	Paton, T. C. M. (See Root, J. B., assignor.)..... (Reissue.)					
136, 260	Patric, C. E., Springfield, Ohio. Grain-drill.....	Feb. 25, 1873	804	261	3	223

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
138, 814	Patric, J. S., Rochester, N. Y. Machine for making laminated pipe for gas, water, &c.	May 13, 1873	320	99	3	534
139, 970	Patrick, W. W., Midway, S. C. Cotton-press.	June 17, 1873	489	154	3	671
135, 148	Pattee, H. H., et al. (See Pattee, J. H., assignor.)					
5, 303	Pattee, J. H., assignor to self, H. H. Pattee, and L. P. Pillsbury, Monmouth, Ill. Cultivator.	Jan. 21, 1873	598	.....	3	83
134, 610	Pattee, L. C., Lebanon, N. H. Circular-saw mill.	Mar. 4, 1873	204	68	3	261
135, 287	Patten, G. M., Auburn, N. Y. Adjustable grain-wheel for harvester-platforms.	Jan. 7, 1873	104	34	3	15
140, 382	Patten, T. B., West Amesbury, Mass. Carriage.	Jan. 28, 1873	742	239	3	107
	Patterson, A. J., Geneseo, assignor of one-half interest to E. W. Osborne, Rochester, N. Y. Thill-coupling.	July 1, 1873	40	13	4	11
146, 018	Patterson, C., Philadelphia, Pa. Valvular stopper for bottles.	Dec. 30, 1873	907	294	4	705
137, 385	Patterson, E. C., Rochester, N. Y. Box.	Apr. 1, 1873	93	30	3	364
144, 129	Same. Cigar-box.	Oct. 28, 1873	691	229	4	465
	Patterson, J. (See Lippincott & Patterson.)					
	Same. (Design.)					
137, 620	Patterson, J., assignor to C. Lippincott & Co., Philadelphia, Pa. Draft-faucet for soda-water apparatus.	Apr. 8, 1873	311	97	3	394
141, 725	Patterson, J., Belfast, Ireland. Machinery for beetling woven fabrics.	Aug. 12, 1873	287	94	4	166
145, 233	Patterson, J., jr., Bangor, Me. Bridle-blind.	Dec. 2, 1873	175	60	4	599
	Patterson, J. M., et al. (See Hettinger, A., assignor.)					
145, 444	Patterson, L., assignor to self and J. Cooper, Parker City, Pa. Brick-machine.	Dec. 9, 1873	361	121	4	626
135, 149	Patterson, N. A., Athens, assignor to self, M. F. and L. N. Miller, Rheatown, Tenn. Screw-propeller.	Jan. 21, 1873	599	195	3	83
142, 269	Patterson, N. A., Cleveland, Tenn. Screw-propeller.	Aug. 26, 1873	793	261 262	4	226
143, 710	Patterson, R. and S., Newcastle-upon-Tyne, England. Grinding-mill.	Oct. 14, 1873	293	96	4	412
137, 713	Patterson, R. H., Hammersmith, England. Manufacture of gas.	Apr. 8, 1873	397	.....	3	401
	Patterson, S. (See Patterson, R. and S.)					
142, 270	Patterson, S. B., assignor to Phillipsburgh Stove Works, Phillipsburgh, N. J. Heating-stove.	Aug. 26, 1873	794	262	4	226
	Patterson, W. (See Planck, J., assignor.)					
140, 788	Patterson, W., Oneonta, N. Y. Stove-pipe shelf.	July 15, 1873	397	136	4	60
	Patterson, W. L., et al. (See Wynn, U., assignor.)					
138, 343	Patterson, W. R., Chicago, Ill. Lubricator for steam-engines.	Apr. 29, 1873	1,002	315	3	480
138, 687	Patterson, W. W., Crawford Springs, Va. Self-waiting table.	May 6, 1873	195	62	3	513
142, 864	Pattillo, R. M., Cartersville, Ga. Reversible plow-point.	Sept. 16, 1873	484	165	4	304
145, 008	Pattison, G. C., Baltimore, Md. Fog-signal.	Nov. 25, 1873	728	245	4	572
	Pattison, J. (See Thompson & Pattison.)					
140, 433	Pattison, J. E., New Orleans, La. Street-railway switch.	July 1, 1873	75	27	4	14
139, 605	Patton, J. D., Trevorton, Pa. Gas-retort.	June 3, 1873	140	46	3	620
138, 181	Patton, S., Chatsworth, Ill. Corn-harvester.	Apr. 22, 1873	828	263	3	458
142, 271	Patton, W. H., Oakland, Cal., Rotating blanket-slucies for washing ore.	Aug. 26, 1873	795	262	4	226
	Paul, A. (See Jordan & Paul.)					
135, 008	Paul, A., assignor of one-half interest to Campbell & Clute, Cohoes, N. Y. Self-acting spinning-mule.	Jan. 21, 1873	482	155	3	74
137, 386	Paul, A., Cohoes, N. Y. Self-acting spinning-jack.	Apr. 1, 1873	93	31	3	364
	Paul, E. B., et al. (See Gray, L. N. B., assignor.)					
137, 476	Paul, F. J., Cincinnati, Ohio. Hydrant.	Apr. 1, 1873	177	56	3	372
140, 639	Paul, J. A., assignor of one-half interest to A. B. Brumbaugh, Huntingdon, Pa. Mail-bag fastening.	July 8, 1873	270	91	4	42
145, 124	Paul, P. P., Brooklyn, N. Y. Shoe-last.	Dec. 2, 1873	79	25	4	591
140, 533	Paull, A. W., Wheeling, W. Va. Process of preparing wall-paper.	July 1, 1873	163	.....	4	21
141, 588	Pavonarius, S., and C. C. Michtle, Philadelphia, Pa. Fish-trap.	Aug. 5, 1873	152	49	4	147
145, 749	Pawlewski, F., and J. Schulz, Milwaukee, Wis. Medical compound or eye-wash.	Dec. 23, 1873	650	.....	4	674
	Payn, B., Albany, N. Y. Coloring and curing tobacco-stems. (Extension.)	Jan. 18, 1873	.....	.....	3	37
139, 419	Payne, J. A., New Orleans, La. Desk and book-case.	May 27, 1873	820	282	3	600
139, 420	Same. Combined trunk and wardrobe.	May 27, 1873	881	283	3	600
143, 636	Payne, J. H., Roseville, Minn. Car-coupling.	Oct. 14, 1873	218	74	4	407
	Payne, J. M. (See Mayfield & Payne.)					
144, 861	Payne, S. F., assignor to Gaylord Manufacturing Company, Chicopee, Mass. Register for machinery.	Nov. 25, 1873	611	208	4	561
138, 688	Payne, S. J., Charlton, England. Plastic compound for furnace-lining, retorts, &c.	May 6, 1873	196	.....	3	513
142, 938	Payne, W. H., and H. Imhof, Lockport, N. Y. Clamp.	Sept. 16, 1873	549	186	4	309
143, 181	Payne, W. L., assignor of one-half interest to J. G. Searle, Topeka, Kans. Well-auger.	Sept. 23, 1873	747	258	4	345
135, 935	Paynter, N. W., Baltimore, Md. Siphon.	Feb. 18, 1873	511	166	3	193
	Payson, C. B. (See Beckett, J. R., assignor.)					
140, 534	Payson, J. G., Foxborough, Mass. Dumping-car.	July 1, 1873	163	55	4	21
138, 182	Payzant, G., Chicago, Ill. Table-leaf support.	Apr. 22, 1873	832	264	3	458
	Peabody, D. (See Carey, A. C., assignor.)					
	Peabody, D., et al. (See Carey, A. C., assignor.)					
137, 714	Peabody, G. H., Brooklyn, N. Y. Portable window platform.	Apr. 8, 1873	400	123	3	401
135, 288	Peabody, J., Bangor, Me. Mechanical movements for converting oscillating into rotary motion.	Jan. 28, 1873	743	239	3	107
141, 234	Peace, J., Merchantville, and W. P. Cox, Camden, N. J. Screw-cutting machine.	July 29, 1873	839	273	4	112
135, 150	Pearce, J., assignor to M. Stevens, Brooklyn, N. Y. Machine for bending sheet-metal.	Jan. 21, 1873	600	195	3	83
138, 183	Peard, J., New York, N. Y. Seat.	Apr. 22, 1873	832	264	3	458
143, 840	Pearl, J., Lawrenceville, N. Y. Milk-cooler.	Oct. 21, 1873	425	142	4	433
141, 073	Pearl, J. C., Mendota, Ill. Wheel-plow.	July 22, 1873	673	225	4	91
138, 431	Pearsall, H. W., Emporia, Kans. Table.	Apr. 29, 1873	1,079	341	3	486
138, 184	Pearse, J. B., Swatara Township, Pa. Cupola furnace.	Apr. 22, 1873	833	264	3	458
142, 722	Pearson, J., Sacramento, Cal. Water-filter.	Sept. 9, 1873	354	119 120	4	282
	Pearson, S. (See Slusser & Pearson)					
5, 604	Pearson, S., Cincinnati, Ohio, assignor to E. G. Gory. Bed-bottom. (Reissue.)	Oct. 14, 1873	328	109	4	415
143, 711	Pearsons, G. W., Odgensburgh, N. Y. Stand-pipe for water-works.	Oct. 14, 1873	294	96	4	412
138, 344	Peartree, P., assignor to J. Ames, Lansingburgh, N. Y. Machine for driving brush-handles.	Apr. 29, 1873	1,003	316	3	480
142, 410	Pease, F. B., Ontario Center, N. Y. Auger-handle.	Sept. 2, 1873	78	26	4	248
140, 070	Pease, H., Dayton, Ohio. Steam-generator.	June 17, 1873	579	183	3	679
145, 750	Pease, J., assignor to self, W. O. Bell, and S. Tryon, Westfield, Mass. Weather-guard.	Dec. 23, 1873	651	213	4	674
138, 185	Pease, J. A., Boston, Mass. Lamp.	Apr. 22, 1873	836	264	3	458
138, 925	Same. Candle-lamp.	May 13, 1873	412	129	3	541
144, 130	Same. Lamp.	Oct. 28, 1873	692	229	4	465
	Pease, S. W. (See Benjamin, E., assignor.)					
	Peaslee, B. F., et al. (See Young, C. H., assignor.)					
	Peaslee, H. A., et al. (See McIntyre, T. K., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 859	Peaslee, T. J., Boston, Mass. Attachment for sewing-machines	Mar. 18, 1873	462	153	3	301
144, 131	Peatfield, S., Ipswich, Mass. Nut-lock	Oct. 28, 1873	693	230	4	465
145, 896	Peavey, A. J., and F. B. Cotton, Boston, Mass., said Peavey assignor to said Cotton. Device for holding and carrying pipe-fitting chucks	Dec. 23, 1873	777	254	4	684
135, 441	Peavey, H., assignor of one-half interest to M. Schwartz, Bangor, Me. Shingle-machine	Feb. 4, 1873	45	14	3	131
142, 723	Peck, C., assignor to M. and C. Peck, New Haven, Conn. Drop-hammer lifter	Sept. 9, 1873	355	120	4	282
137, 477	Peck, C. O., Pittsfield, Mass. Refrigerator	Apr. 1, 1873	178	56	3	372
145, 307	Peck, C. O., Pittsfield, Mass., assignor to W. Lester, South Hadley, Mass. Corpse-pre-server	Dec. 9, 1873	245	82	4	617
143, 780	Peck, G. E., Du Quoin, Ill. Card and ticket printing-press	Oct. 21, 1873	373	{ 123 124 }	{ 4 4 }	429
	Peck, J. C. (See Teachout, S. T., assignor.)					
	Peck, M. (See Peck, C., assignor.)					
	Peck, Stow & Wilcox Company. (See Smith, H., assignor.)					
138, 186	Peck, W., assignor to D. S. Penfield, Rockford, Ill. Windmill	Apr. 22, 1873	837	265	3	458
139, 518	Peck, W., and H. C. Richman, Lombard, Ill. Railway-tie	June 3, 1873	64	22	3	614
141, 377	Peck, W. L., Carthage, N. Y. Carriage-top	July 29, 1873	976	317	4	123
140, 158	Peckham, E., Antwerp, N. Y. Apparatus for treating ore and manufacturing iron and steel	June 24, 1873	675	212	3	695
143, 637	Same. Manufacture of iron and steel	Oct. 14, 1873	219	.....	4	407
	Peckham, J. (See Otis, E., assignor.)					
141, 515	Peckham, W., Middletown, R. I. Railway-rail	Aug. 5, 1873	93	29	4	142
6, 692	Peckover, J., Cincinnati, Ohio. Cooking-stove (Design)	May 27, 1873	.....	.....	3	586
141, 663	Pedden, T., Middletown, Conn. Bobbin-winder for sewing-machines	Aug. 12, 1873	239	75	4	162
	Pedder, J. (See Bolton & Pedder.)					
137, 621	Pedder, J., and G. Abel, Pittsburgh, Pa. Manufacture of iron and steel	Apr. 8, 1873	312	97	3	394
	Pedrick, R. C. (See Stanton & Pedrick.)					
144, 629	Pedrick, W. H., Richmond, Ind. Cotton-harvester	Nov. 18, 1873	401	134	4	534
141, 166	Peek, D. T., New York, N. Y. Brake for preventing retrograde movement in sewing and other machinery	July 22, 1873	760	250	4	98
143, 378	Peel, L. G., Hazlehurst, Miss. Vehicle-wheel	Sept. 30, 1873	931	315	4	366
142, 646	Peer, J. A., Grass Valley, Cal. Ore-concentrator	Sept. 9, 1873	291	96	4	277
142, 647	Same. Ore-washer	Sept. 9, 1873	292	96	4	277
138, 276	Peet, S. J., assignor to the Peet Valve Company, Boston, Mass. Apparatus for separating metals	Apr. 29, 1873	942	297	3	475
138, 277	Same. Screw and nut	Apr. 29, 1873	943	298	3	475
138, 278	Same. Screw-rod	Apr. 29, 1873	944	298	3	475
	Peet Valve Company. (See Peet, S. J., assignor.)					
	Pegram, W. M. (See Browne & Pegram.)					
136, 860	Peirce, C. E., Centreville, Mich. Potato and peanut digger	Mar. 18, 1873	463	154	3	301
144, 630	Peirce, H. L., Taunton, Mass. Process of repairing spinning-rings	Nov. 18, 1873	402	135	4	534
136, 861	Pelham, A., assignor to self and R. Haines, Plymouth, Mich. Door-bolt	Mar. 18, 1873	463	154	3	301
141, 378	Pelham, A., assignor to self, L. C. Hall, and S. H. Fairman, Plymouth, Mich. Fire-escape	July 29, 1873	977	317	4	123
5, 339	Pelham, L., Elmira, N. Y., assignor to E. Andrews. Attaching handles to cross-cut saws. (Reissue)	Mar. 25, 1873	850	278	3	343
136, 862	Pelletier, A., Washington, D. C. Composition for artificial stone, tiles, pavements, &c.	Mar. 18, 1873	464	.....	3	301
141, 290	Peloubet, E. W., Newark, N. J. Car-coupling	July 29, 1873	889	291	4	116
144, 787	Pelton, J. B., Mount Pleasant, Md. Car-brake	Nov. 18, 1873	532	181	4	545
136, 538	Peltz, E., New York, N. Y. Neck-tie supporter	Mar. 4, 1873	169	54	3	259
139, 914	Pember, J. R., Randolph, Vt. Type-writing machine	June 17, 1873	447	139	3	668
	Pemberton, E. L., et al. (See Underwood, J. B., assignor.)					
138, 576	Pendell, J. R., Dryden, N. Y. Wash-boiler	May 6, 1873	98	31	3	505
137, 860	Pender, D. O., Palmyra, Mich. Car-coupling	Apr. 15, 1873	535	166	3	425
	Pendergrast, M., et al. (See Siner, J. B., assignor.)					
135, 580	Penfield, C., New Britain, Conn. Bed-bottom	Feb. 4, 1873	178	56	3	141
143, 996	Penfield, C. W., New Britain, assignor to J. P. Connell, Kensington, Conn. Door-gong	Oct. 28, 1873	581	193	4	456
	Penfield, D. S. (See Peck, W., assignor.)					
138, 689	Penfield, F. C., West Meriden, Conn. Printing-press	May 6, 1873	197	62	3	513
136, 176	Pengelly, T. N., Detroit, Mich. Car-coupling	Feb. 25, 1873	736	237	3	223
144, 562	Penington, A., jr., Brenham, Tex. Cotton and corn planter	Nov. 11, 1873	337	114	4	517
142, 581	Penisten, G., sr., Buchanan, assignor to J. M. Penisten, Schooley's Station, Ohio. Revolving horse-rake	Sept. 9, 1873	240	78	4	273
	Penisten, J. M. (See Penisten, G., sr., assignor.)					
144, 563	Penley, S. H., Chelsea, Mass. Rattan-ware	Nov. 11, 1873	338	114	4	517
137, 954	Penn, M. A., Washington, D. C. Clasp for harness	Apr. 15, 1873	612	193	3	431
139, 809	Penn, P., Cleveland, Ohio. Spring for vehicles	June 10, 1873	347	107	3	652
143, 379	Pennepacker, J., Philadelphia, Pa. Portable burglar alarm	Sept. 30, 1873	932	316	4	366
138, 815	Penney, I. L., Minneapolis, Minn. Lock-cutting machine	May 13, 1873	321	99	3	534
138, 577	Penniston, G. W., North Vernon, Ind. Loading railway flat-cars	May 6, 1873	98	31	3	506
136, 004	Pennock, A. J., and T. A. Chandler, Rockford, Ill. Device for cutting pipe, &c.	Feb. 18, 1873	568	{ 187 188 }	{ 3 3 }	198
145, 234	Pennock, J. L., Coatesville, Pa. Crane	Dec. 2, 1873	176	61	4	599
137, 092	Pennock, S., Kennett's Square, Pa. Power-hammer	Mar. 25, 1873	675	224	3	329
145, 897	Pentlarge, R., Brooklyn, N. Y. Making bungs for casks, &c.	Dec. 23, 1873	779	255	4	684
137, 566	Percy, E. R., Lawrence, Kans. Fire-proof and water-proof roofing	Apr. 8, 1873	267	.....	3	390
141, 074	Same. Water-wheel	July 22, 1873	674	226	4	91
145, 524	Pereau, W. E., Oakland, Cal. Bit-brace	Dec. 16, 1873	447	146	4	645
	Peregoy, N. W. (See Gorman & Peregoy.)					
143, 380	Perez, F., Havana, Cuba. Cultivator	Sept. 30, 1873	933	316	4	366
	Perez, J. B. (See Carbonel, M., assignor.)					
138, 690	Perkins, C. E., Malone, N. Y. Piston-packing	May 6, 1873	198	62	3	513
135, 151	Perkins, C. H., Providence, R. I. Band-pulley	Jan. 21, 1873	600	195	3	83
138, 578	Same. Traction-wheel	May 6, 1873	99	32	3	506
143, 781	Perkins, C. H., assignor to The Rhode Island Horseshoe Company, Providence, R. I. Horseshoe-machine	Oct. 21, 1873	374	124	4	429
143, 782	Same. same	Oct. 21, 1873	375	124	4	429
144, 631	Perkins, C. H., Providence, R. I. Rolling-mill	Nov. 18, 1873	402	135	4	534
144, 632	Same. Guide for rolling-mills	Nov. 18, 1873	403	135	4	534
144, 633	Same. Guide for rolling-mills	Nov. 18, 1873	404	136	4	534
141, 946	Perkins, E. L., J. H. Moulton, and C. E. Sawyer, Boston, Mass. Steam-trap	Aug. 19, 1873	496	164	4	192
	Perkins, F. (See Barry & Perkins.)					
145, 898	Perkins, G. H., assignor to self and Atlantic Refining Company, Philadelphia, Pa. Oil-can nozzle	Dec. 23, 1873	780	255	4	684
137, 478	Perkins, H. H., Osceola, Ill. Cultivator	Apr. 1, 1873	179	57	3	372
138, 579	Perkins, J., Danielsonville, Conn. Window	May 6, 1873	100	32	3	506

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
143, 028	Perkins, L., London, England. Traction-engine.....	Sept. 23, 1873	629	{ 214 215	{ 4	326
145, 525	Same.....Locomotive, portable, and other steam engines.....	Dec. 16, 1873	448	{ 146 147	{ 4	645
141, 291	Perkins, M. R., Portsmouth, N. H. Burglar-alarm.....	July 29, 1873	889	291	4	116
144, 220	Same.....Steering-apparatus.....	Nov. 4, 1873	45	13	4	482
144, 221	Same.....Railway-rail.....	Nov. 4, 1873	45	13	4	482
144, 222	Same.....Door-check.....	Nov. 4, 1873	46	14	4	482
144, 132	Perkins, O. N., assignor to E. Miller & Co., Meriden, Conn. Lamp.....	Oct. 28, 1873	693	230	4	465
138, 926	Perkins, R. B., Almond, N. Y. Shank-laster.....	May 13, 1873	414	129	3	542
6, 491	Perkins, R. W., West Meriden, assignor to self and J. H. Holmes, Wallingford, Conn. Work-holder.....	Mar. 11, 1873	.....	.....	3	272
138, 691	Same.....same.....(Design).....	May 6, 1873	198	62	3	513
143, 588	Perkins, S. R., assignor to self and T. J. Harrison, Greenville, Mich. Separator for thrashing-machines.....	Oct. 14, 1873	177	60	4	403
135, 359	Perkins, T. G., Chicago, Ill. Ruffler for sewing-machines.....	Jan. 28, 1873	808	261	3	112
6, 876	Perkins, W. H., assignor to E. Miller & Co., Meriden, Conn. Lamp-stand.....(Design).....	Sept. 9, 1873	.....	.....	4	270
140, 071	Perrin, A., Marine City, Mich. Adjustable templet for ships' frames.....	June 17, 1873	579	183	3	679
141, 814	Perrin, C. H., New York, assignor to S. E. Tompkins, Sing Sing, N. Y. Check-rein retainer.....	Aug. 12, 1873	370	121	4	173
137, 861	Perrin, D., McGregor, Iowa. Cutter for tonguing and grooving lumber.....	Apr. 15, 1873	535	167	3	425
141, 887	Perrin, E. W., Portland, Oreg., assignor of one-half interest to W. E. Weldon, Solano County, Cal. Table-leaf support.....	Aug. 19, 1873	450	147	4	189
146, 019	Perrin, E. W., Portland, Oreg. Wood pavement.....	Dec. 30, 1873	908	294	4	705
140, 159	Perrin, A. T., Charlestown, assignor to J. Hitchcock, trustee, Boston, Mass. Cutting-attachment for sewing-machines.....	June 24, 1873	677	213	3	695
	Perry, A. J. (See Wilson & Perry.)					
	Perry, B. F. (See Myers, W. H., assignor.)					
	Perry, F. W. (See Neuber & Perry.)					
138, 523	Perry, G., and J. Webb, Chicago, Ill. Metallurgic furnace.....	May 6, 1873	51	17	3	501
	Perry, J. G., Kingston, R. I. Meat-cutter.....(Extension).....	Aug. 2, 1873	.....	.....	4	85
141, 075	Same.....Seat for harvesters, &c.....	July 22, 1873	675	226	4	91
142, 811	Same.....Harvester.....	Sept. 16, 1873	442	149	4	300
135, 581	Perry, J. R., Wilkesbarre, Pa. Reed-organ reed.....	Feb. 4, 1873	179	56	3	141
	Perry, J. S., trustee and executor. (See Easterly, J., assignor).....(Reissue.)					
134, 767	Perry, J. S., Albany, N. Y. Base-burning fire-place heater.....	Jan. 14, 1873	255	83, 84	3	41
	Perry, N. B. (See Easterly, J., assignor).....(Reissue.)					
136, 539	Perry, S., Newport, N. Y. Combined rake and tedder.....	Mar. 4, 1873	170	54	3	259
	Perry, W. (See Evans & Perry.)					
137, 236	Perry, W. G., Manchester, N. H. Spindle for spinning-machines.....	Mar. 25, 1873	805	265	3	339
145, 009	Same.....same.....	Nov. 25, 1873	729	246	4	572
137, 955	Perry, W. L., and A. J. Mathews, Hartwell, Ga. Felly.....	Apr. 15, 1873	613	193	3	431
138, 279	Pert, L. B., Tecumseh, Mich. Revolving book-case.....	Apr. 29, 1873	945	298	3	475
142, 724	Peteler, F., Bloomington, Minn. Dumping-platform.....	Sept. 9, 1873	355	120	4	282
135, 839	Peteler, L. H., New Brighton, N. Y. Railway-track.....	Feb. 11, 1873	418	136	3	172
	Peters, G. E. (See Peters, G. T. & G. E.)					
138, 692	Peters, G. T. & G. E., Jersey City, N. J. Bath-tub for bird-cages.....	May 6, 1873	199	63	3	513
138, 280	Peters, H., Penn Township, Pa. Lever cider-press.....	Apr. 29, 1873	945	298	3	476
	Peters, H. C. (See Miller, F. C., assignor.)					
137, 862	Peters, H. J., Quebec, Canada. Wheelbarrow dumping-car.....	Apr. 15, 1873	536	167	3	425
	Peters, J. W. C. (See Whittlesey & Peters.)					
140, 160	Peters, J. W. C., Chicago, Ill. Woven-wire fabric.....	June 24, 1873	678	213	3	695
	Peters, T. J. (See Smith, J. E., assignor.)					
140, 072	Petersen, C. J. C., Port Chester, N. Y. Can-opener.....	June 17, 1873	580	184	3	679
136, 456	Petersen, N., and R. Roescher, Memphis, Tenn. Mosquito-net frame.....	Mar. 4, 1873	87	30	3	252
140, 589	Petersen, T. E., Copenhagen, Denmark. Compound for preventing incrustation in steam-boilers.....	July 8, 1873	227	.....	4	38
	Peterson, C. J. (See Shipp, Peterson & McLurd.)					
136, 455	Peterson, C. J., Brevard Station, N. C. Machine for upsetting tires.....	Mar. 4, 1873	86	30	3	252
142, 648	Peterson, J. G., Morgantown, N. C. Printing-press.....	Sept. 9, 1873	293	96	4	277
135, 663	Pettee, F. W., assignor of one-half interest to W. P. Welch and A. Chipman, Boston, Mass. Metallic packing for piston-rods, &c.....	Feb. 11, 1873	262	82	3	160
	Pettee, S. E., Bethlehem, Pa. Envelope.....(Extension).....	Mar. 22, 1873	.....	.....	3	297
137, 567	Pettengill, C. B., Hebron, assignor of one-half interest to F. C. Merrill, South Paris, Me. Barrel-header.....	Apr. 8, 1873	267	82, 83	3	390
139, 733	Pettengill, C. B., Hebron, Me. Sad-iron holder and lid lifter.....	June 10, 1873	277	86	3	647
	Pettengill, D. (See Sturges, G., assignor.)					
	Same.....(See Sturges, G. A., assignor.)					
	Petter, G. W., et al. (See Dawson, A. & H. T., assignors.)					
	Pettie, J. G. (See Culver, J. C., assignor.)					
136, 177	Pettit, H., assignor of one-half interest to J. M. Wilson, Philadelphia, Pa. Bridge.....	Feb. 25, 1873	737	237	3	223
140, 383	Pevey, A., Portland, Me. Process for preparing iron chips, &c., for remelting.....	July 1, 1873	41	13	4	11
140, 948	Pevey, C. K., Worcester, Mass. Coverlet.....	July 15, 1873	547	183	4	72
143, 248	Same.....Walking-cane.....	Sept. 30, 1873	814	279	4	357
139, 187	Pfau, J. L., jr., Quincy, Ill. Cooking-range.....	May 20, 1873	661	207	3	574
143, 927	Pfefferkorn, C. L. F., and W. Aust, Manchester, N. H. Loom-shuttle.....	Oct. 21, 1873	495	167	4	439
	Pfisterer, P. D. (See Connor & Pfisterer.)					
143, 462	Pfleeger, G., Deerfield, N. Y. Fire-escape ladder.....	Oct. 7, 1873	55	19	4	385
138, 281	Pflock, A. H., Philadelphia, Pa. Apparatus for packing snuff.....	Apr. 29, 1873	946	299	3	476
135, 582	Pfund, A., New York, N. Y. Compound for hydraulic cement.....	Feb. 4, 1873	179	.....	3	141
140, 073	Same.....Beer-cooler.....	June 17, 1873	581	184	3	679
144, 133	Same.....Ice-elevating track.....	Oct. 28, 1873	694	230	4	465
144, 355	Same.....Hot-air furnace.....	Nov. 4, 1873	153	51	4	491
135, 583	Pharo, E. A., Philadelphia, Pa. Packing-case.....	Feb. 4, 1873	180	56	3	141
136, 178	Phelan, G. E., New York, N. Y. Billiard-table cushion.....	Feb. 25, 1873	738	237	3	223
	Phelan, J. (See Keech, L. P., assignor.)					
	Phelps, A. M., et al. (See Aray, R., assignor.)					
143, 712	Phelps, E. W., Elizabeth, N. J. Saw-sharpening machine.....	Oct. 14, 1873	294	96	4	412
	Phelps, G. M., Brooklyn, N. Y. Telegraphic machine.....(Extension).....	Nov. 1, 1873	.....	.....	4	452
141, 076	Same.....Printing-telegraph.....	July 22, 1873	676	{ 226 227	{ 4	92
144, 285	Same.....same.....	Nov. 4, 1873	94	31, 32	4	486
136, 261	Phelps, I. M., Chicago, Ill. Furnace for chloridizing ores.....	Feb. 25, 1873	806	261	3	218
145, 680	Phelps, I. M., Philadelphia, Pa. Refining iron and steel.....	Dec. 16, 1873	579	190	4	656

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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136, 758	Phelps, J. M., assignor of one-half interest to J. Bartlett, Crogan Station, Pa. Car-coupling	Mar. 11, 1873	366	121	3	284
	Philadelphia Architectural Iron Company. (See Brand, C. F., assignor.)					
	Philadelphia Gas-Machine Company. (See Judd & Doty, assignors.)					
	Same. (See Judd & Pierson, assignors.)					
6, 983	Philbrook, J. W., West Roxbury, Mass. Glass bottle (Design)	Nov. 4, 1873			4	478
5, 304	Philip, P., Stockport, N. Y. Method of operating windlasses (Extension)	July 12, 1873			4	35
135, 840	Philip, P., Ghent, N. Y. Method of operating windlasses (Reissue)	Mar. 4, 1873	205	68	3	262
135, 841	Philip, P., Stockport, N. Y. Corn-husker	Feb. 11, 1873	419	136	3	172
142, 040	Same. same	Feb. 11, 1873	419	136	3	172
142, 175	Philippi, A., Saint Louis, Mo. Grain-binder	Aug. 19, 1873	582	191	4	199
	Phillip, W. H., Brooklyn, N. Y. Revolving fire-arm	Aug. 26, 1873	715	236	4	220
	Phillipp, W. K. (See Sewell, G., assignor.)					
140, 161	Phillips, A. and A., Cleveland, Ohio. Screw-cutting machine	June 24, 1873	679	213	3	695
135, 936	Phillips, C. A., Chicago, Ill. Bosom-pad	Feb. 18, 1873	512	167	3	193
138, 282	Phillips, C. H., New York, and L. Reid, Brooklyn, N. Y. Medical compound called the milk of magnesia	Apr. 29, 1873	947		3	476
141, 167	Phillips, C. H., and L. Reid, assignors to C. H. Phillips, New York, N. Y. Making a hydrate or milk of magnesia	July 22, 1873	761		4	98
	Phillips, E. F. (See Reed & Phillips.)					
142, 411	Phillips, G., Biddeford, Me. Quilting-frame	Sept. 2, 1873	79	26	4	249
143, 249	Phillips, G., Augusta, Me. Running-gear for wagons	Sept. 30, 1873	814	279	4	357
5, 583	Phillips, G. H., Troy, N. Y. Cooking-stove (Reissue)	Sept. 30, 1873	950	321	4	368
137, 479	Phillips, H. F., assignor to Sheldon & Co., Auburn, N. Y. Carriage-axle lubricator	Apr. 1, 1873	180	57	3	372
140, 217	Phillips, H. S., assignor to self and R. Blair, Wilmington, Del. Shutter-worker	June 24, 1873	724	228	3	699
	Phillips, J. M. (See Long, P., assignor.)					
	Phillips, N. M. (See Marston & Phillips.)					
137, 480	Phillips, P. W., Salem, Mass. Curtain-fixture	Apr. 1, 1873	181	57	3	372
	Phillips, S. S. (See Frank, J. H., assignor.)					
144, 475	Phillips, T., and J. Golletz, Leavenworth, Kans. Drill for well-boring	Nov. 11, 1873	262	88	4	511
	Phillips, W. V. (See Clough, C. F., assignor.)					
	Phillipsburgh Stove Works. (See Patterson, S. B., assignor.)					
144, 356	Phipps, D. G., New Haven, Conn. Valve for water-pipes	Nov. 4, 1873	154	51	4	491
6, 637	Phipps, J., assignor to Landenberger, M., & Co., Philadelphia, Pa. Trimming (Design)	May 6, 1873			3	497
6, 638	Same. same (Design)	May 6, 1873			3	497
6, 696	Same. Nubia (Design)	June 3, 1873			3	608
6, 710	Same. same	June 17, 1873			3	663
139, 810	Same. Knit fringe or border	June 10, 1873	347	108	3	652
144, 223	Phipps, W. H., Poquonock, Conn. Door-securer	Nov. 4, 1873	46	14	4	482
	Pickard, A. C. (See Putnam, D., assignor.)					
	Pickard, J. (See Pickard, T. and J.)					
138, 816	Pickard, T. and J., said T. assignor to said J. Pickard, Minonk, Ill. Bolster-plate for wagons	May 13, 1873	321	99	3	534
144, 286	Pickering, E. C., Boston, Mass. Balances	Nov. 4, 1873	96	32	4	486
136, 616	Pickersgill, W. C., assignor to Providence Tool Company, Providence, R. I. Sewing-machine	Mar. 11, 1873	247	83	3	274
138, 187	Pickert, F., Concord, N. H. Reversible pinion for watches	Apr. 22, 1873	838	265	3	459
139, 328	Pickford, E., New Brunswick, N. J. Loom for weaving piled fabrics	May 27, 1873	796	254	3	593
144, 788	Picking, G. G., Kingsland, and W. Hopkins, Islington, assignors to selves and J. Hart and J. L. Sampson, London, England. Steam-cylinder and piston-valve	Nov. 18, 1873	532	181	4	545
136, 668	Piedra, M., Williamsburgh, N. Y. Paper-feeding machine	Mar. 11, 1873	292	98	3	278
	Pierce, A. (See Pierce, C., assignor.)					
	Pierce, B. S., New Bedford, Mass., and M. R. Pierce, Woodstock, N. Y. Machine for making drain-pipes (Extension)	Apr. 19, 1873			3	416
	Pierce, B. S., New Bedford, Mass., and M. R. Pierce, New York, N. Y. Manufacture of porous ware (Extension)	Dec. 27, 1873			4	671
141, 947	Pierce, C., assignor to self and A. Pierce, Portland, Mich. Mortar-mixer	Aug. 19, 1873	497	164	4	192
141, 664	Pierce, C. D., Lawrence, Kans. Earth-auger	Aug. 12, 1873	239	75	4	162
	Pierce, C. H., et al. (See Utley, R. G., assignor.)					
138, 188	Pierce, C. L., Natick, Mass. Hot-air furnace	Apr. 22, 1873	839	265	3	459
138, 189	Same. same	Apr. 22, 1873	840	265	3	459
143, 250	Pierce, D., Washington, D. C., assignor to J. W. Willis. Sifter	Sept. 30, 1873	815	280	4	357
	Pierce, E., et al. (See Hammond, J. E., assignor.)					
	Pierce, E. N., et al. (See Hastings, G. S., assignor.)					
	Same. (See Hastings, G. S., jr., assignor.)					
142, 507	Pierce, E. P., Boston, Mass. Machine for skiving and feather-edging boot and shoe soles	Sept. 2, 1873	167	54	4	255
134, 818	Pierce, E. S., Hartford, and J. A. Ayres, Groton, assignors to National Screw Company, Hartford, Conn. Machine for slotting heads of screws	Jan. 14, 1873	302	97	3	44
134, 768	Pierce, G., Boston, Mass. Machine for pressing cigar-bunches	Jan. 14, 1873	256	84	3	41
141, 458	Pierce, J. D., Columbia, Mo. Iron bridge	Aug. 5, 1873	44	14	4	138
	Pierce, J. W. (See Townsend, W., assignor.)					
	Pierce, M. R. (See Pierce, B. S. and M. R.) (Extension)					
	Pierce, R. V. (See Paden, S. K., assignor.)					
	Pierson & Morehouse. (See Hallock, W. R., assignor.)					
	Pierson, C. H. (See Judd & Pierson.)					
136, 337	Pierson, D., J. W. Macy, and J. D. Moore, Grinnell, Iowa. Corn-planter	Feb. 35, 1873	872	281	3	233
143, 182	Pierson, J. S., Brooklyn, N. Y. Fire-escape ladder	Sept. 23, 1873	747	258	4	335
138, 580	Pigot, J., Brooklyn, N. Y. Self-closing stop-cock	May 6, 1873	100	32	3	506
138, 042	Piggott, J. J., Saint Louis, Mo. Bake-oven	Apr. 22, 1873	711	225	3	449
134, 925	Pike, D., assignor of one-half interest to C. Satterly, New Orleans, La. Sash-holder	Jan. 14, 1873	395	126	3	52
142, 508	Pike, D., and O. B. Graham, Bridgeport, Conn. Lamp-extinguisher	Sept. 2, 1873	168	54	4	255
	Pike, J. J. (See Rubarth, L., assignor.)					
141, 888	Pilcher, W., Chicago, Ill. Bellows	Aug. 19, 1873	451	147	4	189
140, 301	Pilkington, J., assignor of three-fourths interest to J. H. Billington & Co., Philadelphia, Pa. Heater and feeder for steam-boilers	June 24, 1873	794	252	3	705
	Pilkington, R., et al. (See O'Neill, E. V., assignor.)					
134, 926	Pilkington, W. W., St. Helens, England. Apparatus for manufacturing window-glass	Jan. 14, 1873	395	126	3	52
141, 012	Fillings, G. T., Philadelphia, Pa. Milling-machine (Reissue)	July 22, 1873	620	209	4	87
	Pillsbury, I. P. (See Morton, C. P., assignor.)					
	Pillsbury, I. P., et al. (See Pattee, J. H., assignor.)					
146, 020	Pimley, J. E., Newark, N. J. Can for transporting oil, &c	Dec. 30, 1873	909	294	4	705
137, 093	Pinchard, J., San Francisco, Cal. Compound and apparatus for the cure of asthma	Mar. 25, 1873	676	225	3	329
	Pindar, J. H., et al. (See Hobart, G. W., assignor.)					
5, 714	Pine, J., Troy, N. Y. Harvester (Reissue)	Dec. 30, 1873	1,008	324	4	713
139, 689	Pine, J., assignor to E. B. Leverich, Brooklyn, N. Y. Extension-ladder	June 10, 1873	229	73	3	643

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Pingree, F. C. (See Berry & Pingree.)					
	Pingry, W. M., administrator. (See Dodge, P.) (Extension.)					
139, 475	Pink, C. and M. Silverberg, Cairo, Ill. Envelope.	June 3, 1873	28	9	3	611
	Piper, E. J. (See Stebbins & Piper.)					
138, 190	Piper, E. J., Springfield, Mass. School-chair	Apr. 22, 1873	841	266	3	459
139, 915	Piper, F. M., Chicago, Ill. Cooler for wine, &c.	June 17, 1873	449	139	3	668
138, 817	Piper, J. L., Pittsburg, Pa. Metallic column	May 13, 1873	322	99	3	534
141, 665	Same.	Aug. 12, 1873	240	76	4	162
134, 702	Piper, R. U., Girard, Mich., assignor of one-half interest to M. Heath, Chicago, Ill. Covering for roofs.	Jan. 7, 1873	191	62	3	22
135, 152	Same. Fire-proof compounds for coating roofs, &c.	Jan. 21, 1873	601		3	83
135, 153	Same. Fire-proof paper for roofs, &c.		601		3	83
6, 762	Pitbladdo, T., Brooklyn, N. Y. Cemetery-fence. (Design.)	July 8, 1873			4	36
	Piteairn, R., et al. (See Kinzer, J., assignor.)					
136, 669	Pitcher, H., Fond du Lac, Wis. Wheel for vehicles.	Mar. 11, 1873	295	98	3	278
138, 927	Same. Boring-machine.	May 13, 1873	414	130	3	542
5, 279	Pitcher, L. D., Dixon, Ill. Hay and manure fork. (Reissue.)	Feb. 11, 1873	452	147	3	175
	Pitcher, R. L. (See Elwood & Pitcher.)					
	Pitkin, A. P., Hartford, Conn. Steam-pressure regulator. (Extension.)	June 14, 1873			3	640
138, 524	Same. Water-indicator for steam-boilers.	May 6, 1873	52	17	3	502
	Pitkin, P. P., et al. (See Lane, D., assignor.)					
140, 590	Pitkin, W. L., and C. J. Gleason, Montpelier, Vt. Compound for cleaning gas-retorts.	July 8, 1873	227		4	38
141, 235	Pitrat, M. J., assignor of three-fourths interest to N. S. Angell, J. Hannan, and D. Williams, Gallipolis, Ohio. Thread-cutter.	July 29, 1873	839	274	4	112
139, 811	Pitt, W. A., New York, N. Y. Lighting gas by electricity.	June 10, 1873	348	108	3	652
	Pittman, G. W., and W. C. Boone, Brooklyn, N. Y. Machinery for laying rope. (Extension.)	Apr. 5, 1873			3	325
139, 916	Pittman, G. W., Keokuk, Iowa. Fire-proof vault.	June 17, 1873	450	140	3	668
	Pitts, E. (See Ebert & Pitts.)					
135, 360	Pitts, J. K., McLean, Ill. Plow-coupling.	Jan. 28, 1873	809	261	3	112
136, 863	Planck, J., assignor to self and W. Patterson, Constantine, Mich. Millstone-driver.	Mar. 18, 1873	465	154	3	301
139, 606	Plank, J. H., Bloomfield, Iowa. Sewing-machine caster.	June 3, 1873	140	46	3	620
136, 759	Plant, E. F., Burr Oak, Mich. Car-coupling.	Mar. 11, 1873	367	122	3	284
137, 023	Plant, E. H., Plantsville, Conn. Die for making carriage-bolts.	Mar. 18, 1873	602	199	3	312
145, 966	Plant, F., Bricksburgh, N. J. Stump-extractor.	Dec. 30, 1873	862	280	4	701
144, 287	Platt, A., New York, N. Y. Clock-escapement.	Nov. 4, 1873	97	32	4	486
138, 191	Platt, A. L., assignor to J. D. and T. K. Connors, Bloomington, Ill. Nutmeg-grater.	Apr. 22, 1873	841	266	3	459
136, 262	Platt, C. H. and G. A. Stanbery, Norwalk, Ohio. Knitting-machine needle.	Feb. 25, 1873	808	261	3	228
137, 568	Same. Knitting-machine.	Apr. 8, 1873	268	83	3	390
138, 525	Platt, C. M., Waterbury, Conn. Manufacture of buttons.	May 6, 1873	52	18	3	502
138, 432	Platt, E. B., Florence, Ind. Press.	Apr. 29, 1873	1, 079	341	3	486
	Platt, G. H., et al. (See Hunter, G. W., assignor.)					
	Platt, J. F. (See Tracy & Platt.)					
138, 098	Platt, R. B., Hazleton, Pa. Miner's bar.	Apr. 22, 1873	758	241	3	452
137, 024	Platt, W. H., Dayton, Ohio. Cultivator.	Mar. 18, 1873	602	200	3	312
137, 569	Same. Harrow.	Apr. 8, 1873	272	83	3	390
143, 713	Same. Harrow-tooth.	Oct. 14, 1873	296	97	4	412
137, 481	Platt, W. K., Camden, N. J., assignor to self and A. M. Greene, Philadelphia, Pa. Fire-extinguisher.	Apr. 1, 1873	182	57	3	372
138, 693	Plattenburg, J. W., assignor to self and J. G. Armstrong, Tiffin, Ohio. Wagon-seat.	May 6, 1873	200	63	3	513
	Platts, G. (See Walden & Platts.)					
	Same. (See Walden, J., assignor.) (Reissue.)					
143, 783	Platts, G., and J. Walden, Newark, N. J. Machine for crimping and folding leather.	Oct. 21, 1873	376	124	4	429
5, 522	Platts, H., Ithaca, N. Y. Billiard-cue. (Reissue.)	Aug. 5, 1873	187	60	4	150
139, 519	Same.	June 3, 1873	64	22	3	614
138, 526	Blecker, W. J., Bushnell, Ill. Harvester-dropper.	May 6, 1873	53	18	3	502
140, 789	Pleins, F. M., Dubuque, Iowa. Manufacture of soap.	July 15, 1873	397		4	60
	Plumb, R. (See Burdick, O. C., assignor.)					
140, 535	Plumb, W. H., Paterson, N. J., assignor to J. A. Sterling, New York, N. Y. Jigger for separating ore.	July 1, 1873	164	56	4	22
	Plume & Atwood Manufacturing Company. (See Atwood, L. J., assignor.)					
	Plumer, J., et al. (See Enos, J. A., assignor.)					
141, 379	Plumer, W., Lexington, Mass. Manufacture of glue.	July 29, 1873	978	{ 317 318 }	{ 4 4 }	{ 123 599 }
145, 235	Plummer, G. H., New York, N. Y. Cork or stopper holder.	Dec. 2, 1873	177	61	4	599
	Plummer, J. F., et al. (See Newton, F. W., assignor.) (Reissue.)					
	Plummer Sewing-Machine Company. (See Whiting, W. M., assignor.)					
144, 698	Plympton, N., Boston, Mass. Tea-kettle.	Nov. 18, 1873	459	156	4	538
139, 188	Poage, J. N., Cincinnati, Ohio. Water-column for railway water-tanks.	May 20, 1873	661	{ 207 208 }	{ 3 3 }	{ 574 173 }
141, 815	Same. Balanced valve for stand-pipes.	Aug. 12, 1873	371	122	4	173
145, 236	Same. Watering-column for railway-tanks.	Dec. 2, 1873	177	61	4	599
141, 666	Pocheron, A., Paris, France, assignor to E. Cannington. Glass-furnace.	Aug. 12, 1873	241	76	4	162
141, 948	Poe, J. B., assignor to self and J. F. Allison, Worthington, Ind. Machine for making chair and basket splints.	Aug. 19, 1873	498	164	4	193
143, 183	Poffenbarger, J., Farmersville, Ohio. Carriage-top setter.	Sept. 23, 1873	748	{ 258 259 }	{ 4 4 }	{ 336 336 }
	Poh & Raichle. (See Delouest, A. E., assignor.)					
	Pohlman, J. W. (See Stirling & Pohlman.)					
	Polder, P. (See Cone & Polder.)					
143, 251	Pole, B. C., Washington, D. C. Ordnance, and projectile therefor.	Sept. 30, 1873	816	280	4	357
135, 442	Polhamus, J. H., Albany, N. Y. Refrigerating-cupboard.	Feb. 4, 1873	45	14	3	131
143, 528	Pollard, J. E., Norfolk, Mass. Manufacture of felt-cloth.	Oct. 7, 1873	110		4	389
	Polley, H. (See Rosenfield, A., assignor.)					
141, 726	Pollitt, J., Edon, Ohio. Spring-bed bottom.	Aug. 12, 1873	288	94	4	166
	Pollock, A., et al. (See Goodrich, A. S., assignor.)					
138, 192	Pomeroy, C., Mattoon, Ill. Harvester-cutter.	Apr. 22, 1873	842	266	3	459
143, 714	Pomeroy, C., and J. D. Owen, Mattoon, Ill. Shovel-handle.	Oct. 14, 1873	297	97	4	412
137, 387	Pomeroy, D., Green Point, N. Y. Truss.	Apr. 1, 1873	96	31	3	364
139, 917	Pomeroy, D. and W., assignors to J. R. D., and M. E. Pomeroy, New York, N. Y. Truss.	June 17, 1873	451	140	3	668
	Pomeroy, J. R., et al. (See Pomeroy, D. and W., assignors.)					
	Pomeroy, M. E., et al. (See Pomeroy, D. and W., assignors.)					
	Pomeroy, W. (See Pomeroy, D. and W.)					
	Pomeroy, W. L., et al. (See Newton, F. W., assignor.) (Reissue.)					
	Pompeji, F. G. (See Kline & Jack, assignors.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 283	Ponce, J. P., assignor to self and J. Miller, Mayfield, Cal. Automatic gate	Apr. 29, 1873	948	299	3	476
138, 928	Pond, D. B., Woonsocket, R. I. Washing-machine	May 13, 1873	415	130	3	542
144, 862	Pond, L., Foxborough, Mass. Hose-coupling spanner	Nov. 25, 1873	612	208	4	561
138, 760	Pond, L. W., assignor to self and The Eau Claire Lumber Company, Eau Claire, Wis. Boom and raft-rudder	May 13, 1873	272	84	3	529
140, 384	Pond, M. W., Elyria, Ohio. Harness-pad	July 1, 1873	42	14	4	11
140, 385	Same	July 1, 1873	43	14	4	11
143, 381	Same	Sept. 30, 1873	933	316	4	366
	Pond, O. M. (See Bingham & Pond.)					
137, 094	Same	Mar. 25, 1873	676	225	3	329
	Pond, O. N. (See Sweeney, H. M., assignor.)					
140, 386	Pool, I. W., Eau Claire, Wis. Log-turner	July 1, 1873	44	15	4	11
143, 184	Pool, S., Chapel Hill, N. C. Adding-machine	Sept. 23, 1873	749	259	4	336
5, 330	Pool, T., Brunswick, Ohio, assignor to Metropolitan Washing-Machine Company. Clothes-wringer	Mar. 18, 1873	628	207	3	314
145, 751	Pooley, T., assignor of one-half interest to N. Johnson, Blackberry Station, Ill. Miter-machine	Dec. 23, 1873	651	214	4	674
	Pooley, W. C. (See Fritz & Pooley.)					
	Poorman, C. L. (See Parker, G. W., assignor.)					
5, 622	Pope, F. L., et al. (See Lockwood, R. M., assignor.)					
	Pope, F. L., Elizabeth, N. J., assignor to self and S. C. Hendrickson, Brooklyn, N. Y., J. N. Ashley and J. D. Lincoln, Greenville, N. J. Electric signaling apparatus for railways	Oct. 21, 1873	529	{ 175 } { 176 }	{ 4 }	441
140, 536	Pope, F. L., Elizabeth, N. J. Circuit for electric railway-signal	July 1, 1873	166	56	4	22
140, 790	Same	July 15, 1873	399	136	4	60
143, 529	Same	Oct. 7, 1873	111	38	4	389
145, 308	Same	Dec. 9, 1873	246	82	4	617
5, 523	Pope, F. L., Elizabeth, and T. A. Edison, Newark, N. J., assignors by mesne assignment to The Gold and Stock Telegraph Company, New York, N. Y. Printing-telegraph. (Reissue)	Aug. 5, 1873	187	60	4	150
139, 476	Pope, J. L., Cleveland, Ohio. Machine for tapping pipe-fittings	June 3, 1873	29	9	3	611
	Pope, T. S., et al. (See Burney, F., assignor.)					
142, 649	Pope, W. D., Gadsden, Ala. Railway-car brake	Sept. 9, 1873	294	96	4	277
143, 638	Same	Oct. 14, 1873	221	74	4	407
142, 939	Popping, J., New York, N. Y., assignor of two-thirds interest to H. Schierloh, Jersey City, N. J., and H. Schierloh, New York, N. Y. Welding iron and steel	Sept. 16, 1873	549	.....	4	309
145, 445	Popping, J., assignor to self and W. L. Godfrey, New York, N. Y. Welding iron and steel	Dec. 9, 1873	362	.....	4	627
142, 349	Porta, P., assignor to W. Uda and M. B. S. Uda, Milan, Italy. Fireman's ladder	Sept. 2, 1873	24	9	4	244
139, 260	Porter, A., Chicago, Ill. Nut-lock	May 27, 1873	739	234	3	588
144, 863	Porter, A. W., New York, N. Y. Apparatus for carbureting gas	Nov. 25, 1873	613	208	4	561
136, 540	Porter, C., Nunda, N. Y. Car-coupling	Mar. 4, 1873	172	55	3	259
	Porter, C. B., & Co. (See Fallows, J., assignor.)					
144, 864	Porter, D., Cleveland, Ohio. Sewing-machine	Nov. 25, 1873	614	209	4	562
144, 789	Porter, H., Polo, Ill. Binder's attachment for harvesters	Nov. 18, 1873	534	182	4	545
	Porter, H. K. (See Porter, T. W. & H. K.)					
144, 790	Porter, H. K., Boston, Mass. Shifting top for vehicles	Nov. 18, 1873	535	182	4	545
146, 093	Same	Dec. 30, 1873	972	314	4	711
5, 653	Porter, H. K. & T. W., Boston, Mass., assignors by mesne assignment to C. Parker, Meriden, Conn. Vise	Nov. 11, 1873	366	123	4	519
139, 812	Porter, J. G., New York, N. Y., and E. Davis, Jersey City, N. J. Heating-furnace	June 10, 1873	349	108	3	652
	Porter, L. P., New Brunswick, N. J. Elastic toy	Feb. 15, 1873	.....	.....	3	127
145, 010	Porter, N., Peabody, Mass. Apparatus for drying tan	Nov. 25, 1873	729	246	4	572
	Porter, T. W. (See Porter, H. K. & T. W.)					
143, 029	Porter, T. W., Boston, Mass. Wheel for vehicles	Sept. 23, 1873	631	215	4	326
143, 030	Same	Sept. 23, 1873	632	215	4	326
143, 031	Porter, T. W. & H. K., Boston, Mass. Foot-rail for carriages	Sept. 23, 1873	633	216	4	326
	Post & Co. (See Walton, G., assignor.)					
	Post, B. M. (See Oakley & Post.)					
143, 185	Post, F., Clinton, Iowa. Wagon	Sept. 23, 1873	750	259	4	336
136, 760	Post, I. M., Philadelphia, Pa. Cuff	Mar. 11, 1873	368	122	3	284
140, 537	Same	July 1, 1873	167	56	4	22
140, 538	Same	July 1, 1873	167	56	4	22
136, 670	Post, J. L., Ashley, Ill. Fruit-drier	Mar. 11, 1873	295	98	3	278
134, 703	Post, J. W., Lansing, Mich. Carriage-spring	Jan. 7, 1873	192	62	3	22
135, 842	Post, N. L., East Cleveland, Ohio. Wrench	Feb. 11, 1873	421	137	3	172
	Post, P. S. (See Michaels & Broadwell, assignors.)					
140, 591	Potter, A., Philadelphia, Pa. Gas-lighting apparatus	July 8, 1873	228	76	4	38
	Potter, A. J. (See Von Dorn, T. L., assignor.)					
	Potter, B., jr. (See Dodge & Potter)					
	Potter, B. F. (See Sheears, T. J., assignor.)					
	Potter, C., jr. (See Cranston, J. H., assignor.)					
140, 640	Potter, G. P., Coventry, R. I. Window weather-strip	July 8, 1873	271	92	4	42
144, 224	Potter, H. H., Sterlingville, N. Y. Railway-switch	Nov. 4, 1873	47	14	4	482
145, 446	Same	Dec. 9, 1873	363	121	4	627
138, 929	Potter, H. T., Norwich, Conn. Device for stopping the spindles of spinning-frames	May 13, 1873	416	130	3	542
142, 509	Same	Sept. 2, 1873	168	55	4	255
140, 302	Potter, J. C., Saint Helena, Cal. Plow	June 24, 1873	795	253	3	705
136, 179	Potter, M., Mendon, Mich. Plow-wheel	Feb. 25, 1873	738	238	3	223
143, 928	Potter, M. F., Kanesville, Ill. Apparatus for treating the eye	Oct. 21, 1873	496	167	4	439
	Potter, Sons & Co. (See Barrett, J., assignor.)					
138, 581	Potter, T., Jackson, Miss. Safety-guard for pocket-books	May 6, 1873	101	32	3	506
5, 593	Potter, T. O., and J. W. Smith, Boston, Mass., assignors to The Bay State Suspender Company. Suspenders	Oct. 7, 1873	148	49	4	392
	Potter, T., Sons & Co. (See Hutchinson, J., assignor.)					
	Same					
138, 761	Potter, W., jr., Andover, N. Y. Inside blind	May 13, 1873	273	84	3	529
134, 769	Potts, E., Philadelphia, Pa. Washing-machine	Jan. 14, 1873	257	84	3	41
142, 865	Potts, W. W., Swedeland, Pa. Portable fence	Sept. 16, 1873	485	166	4	304
135, 937	Potwin, W. S., Chicago, Ill. Slop-jar	Feb. 18, 1873	512	167	3	193
141, 889	Same	Aug. 19, 1873	451	147	4	189
137, 237	Poulson, B., Fort Wayne, Ind. Door-check	Mar. 25, 1873	806	265	3	339
145, 681	Poulson, J., assignor of one-half interest to M. Baldwin, Frenchtown, N. J. Nail-plate feeder	Dec. 16, 1873	580	190	4	656
139, 607	Poulson, N., New York, N. Y. Fire-proof roof	June 3, 1873	141	46	3	620
135, 664	Poundstone, C. N., Livonia, Ill. Rotary cultivator	Feb. 11, 1873	262	83	3	160

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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134, 927	Powell, A. H., Philadelphia, Pa., assignor to self and J. Wood, Red Bank, N. J., and E. R. Bennet, New York, N. Y. Lift and force pump	Jan. 14, 1873	397	126	3	52
146, 094	Powell, E., New York, N. Y. Tuck-creaser for sewing-machines	Dec. 30, 1873	973	314	4	711
6, 337	Powell, J., assignor to H. J. Dixon & Sons, Kidderminster, England. Carpet.. (Design)	Jan. 7, 1873			3	7
6, 360	Same..... same... (Design)	Jan. 21, 1873			3	71
6, 590	Same..... same... (Design)	Apr. 15, 1873			3	417
6, 591	Same..... same... (Design)	Apr. 15, 1873			3	417
6, 784	Same..... same... (Design)	July 22, 1873			4	85
138, 527	Powell, J. B., assignor of one-half interest to E. P. Michener, Philadelphia, Pa. Gate for railway-crossings	May 6, 1873	54	18	3	502
142, 812	Powell, J. G., Philadelphia, Pa. Clamp for sewing-machine attachments	Sept. 16, 1873	442	149	4	300
143, 589	Same..... Corder for sewing-machines	Oct. 14, 1873	177	60	4	403
141, 013	Powell, J. P., Cincinnati, Ohio. Music notation	July 22, 1873	622	209	4	87
143, 032	Powelson, H., New Brunswick, N. J. Carpet stretcher	Sept. 23, 1873	633	216	4	326
144, 865	Power, H. L., London, England. Umbrella	Nov. 25, 1873	614	209	4	562
134, 611	Power, J. M., Port Discovery, Wash. Lubricator	Jan. 7, 1873	105	34	3	15
143, 639	Same..... same	Oct. 14, 1873	221	74	4	407
	Powers, A. A., et al. (See Hemenway, C. V., assignor.)					
137, 863	Powers, C. M., Ridgewood, N. J. Thrashing-machine	Apr. 15, 1873	537	167	3	425
139, 971	Same..... Beer-strainer	June 17, 1873	490	155	3	671
	Powers, D., & Sons. (See Barrett, J., assignor.) (Design)					
	Same..... (See Meyer, J., assignor.) (Design)					
136, 180	Powers, D. J., Chicago, Ill. Woven-wire mattress-frame	Feb. 25, 1873	739	238	3	223
142, 940	Same..... Tightening device for woven-wire mattress	Sept. 16, 1873	550	186	4	309
144, 564	Same..... Wire-mattress	Nov. 11, 1873	339	114	4	517
	Powers, G. C. (See Graves, Powers & Graves.)					
143, 715	Powers, I., Laingsburgh, Mich. Wagon-seat	Oct. 14, 1873	297	97	4	412
136, 092	Powers, L. A., West Meriden, Conn. Game-table	Feb. 18, 1873	645	211	3	204
144, 791	Same..... Rake	Nov. 18, 1873	536	182	4	545
	Powers, P. F. (See Wasson, Powers, & Dungan.)					
135, 466	Powers, R., Charleston, Miss. Cotton-press	Feb. 4, 1873	87	27	3	134
142, 272	Powers, W. P., North La Crosse, Wis. Belting	Aug. 26, 1873	796	262	4	226
	Powers, Z. M. (See Allerton & Powers.)					
140, 949	Prahl, C., Stapleton, N. Y. Match-box	July 15, 1873	548	184	4	72
	Prall, W. E. (See Blanchard & Prall.)					
5, 715	Prall, W. E., Washington, D. C. Steam water-elevator..... (Reissue)	Dec. 30, 1873	1,009	324	4	714
145, 309	Same..... Pneumatic railway-signal	Dec. 9, 1873	248	83	4	618
146, 095	Prall, W. E. and D. A. Burr, Washington, D. C. Steam vacuum-pump	Dec. 30, 1873	974	314 315	4	711
5, 425	Prate, H. T., New York, N. Y. Life-preserving stool..... (Reissue)	May 27, 1873	906	292	3	602
	Pratt & Letchworth. (See Bottomley, T. J., assignor.) (Reissue)					
	Pratt, C. A. (See Orr & Sears, assignors.)					
146, 021	Pratt, D. R., Greenfield, Ohio. Sawing-machine	Dec. 30, 1873	909	294	4	705
135, 584	Pratt, G. M., and V. A. King, assignors to the Victor Sewing-Machine Company, Middletown, Conn. Machine for dressing cam-grooves	Feb. 4, 1873	181	56	3	141
145, 967	Pratt, H., and T. T. Munhall, Fairburz, Ill. Truck	Dec. 30, 1873	863	280	4	702
141, 380	Pratt, M., Deep River, Conn. Machine for shaping piano-keys	July 29, 1873	979	318	4	123
140, 791	Pratt, M. E., Prattville, Ala. Cotton-gin	July 15, 1873	401	136	4	60
	Pratt, N. B., Deep River, Conn. Carpet-sweeper..... (Extension)	Feb. 8, 1873			3	100
	Pratt, R. N. (See McNeill & Pratt.)					
	Pratt, R. N. (See Traphagen, H. L., assignor.)					
137, 482	Pratt, T. W., Boston, Mass. Wooden truss-bridge	Apr. 1, 1873	183	58	3	372
142, 273	Same..... Steam-boiler	Aug. 26, 1873	796	263	4	226
143, 530	Pratt, W. A., Baltimore, Md. Lubricator	Oct. 7, 1873	114	39	4	390
136, 864	Pratt, Z. I., Chicago, Ill. Candlestick	Mar. 18, 1873	465	154	3	301
136, 865	Same..... Fare-box	Mar. 18, 1873	466	155	3	301
141, 168	Pray, D. F., Boston, Mass. Lubricator	July 22, 1873	763	250	4	98
	Pregamann, A. (See Aulbach, J., assignor.)					
	Preis, J. (See Goebel & Preis.)					
136, 383	Prentiss, C. H., Cleveland, Ohio. Gas-heater	Mar. 4, 1873	29	10	3	248
142, 117	Prentiss, E. F., Philadelphia, Pa. Composition for coating wood and iron	Aug. 26, 1873	668		4	216
144, 792	Prentiss, T. M., Boston, Mass. Portable fly and mosquito net	Nov. 18, 1873	536	183	4	545
135, 154	Presbrey, C. H., assignor to Novelty Iron Works Manufacturing Company, Sterling, Ill. School-desk	Jan. 21, 1873	602	196	3	83
	Presbrey, O. F., et al. (See Hunter, R. F., assignor.)					
136, 541	Prescott, D. C., Marinette, Wis. Saw-mill	Mar. 4, 1873	173	55	3	259
	Prescott, E. (See Cobb, B. F., assignor.) (Reissue)					
	Prescott, G. A. (See Barsalouse & Graham, assignors.)					
	Prescott, G. A. (See Barsaloux & Prescott.)					
135, 361	Prescott, G. A., Sandy Hill, N. Y. Saw-swaging machine	Jan. 28, 1873	810	261	3	112
136, 093	Prescott, G. A., and J. Barsaloux, Sandy Hill, N. Y. Spike-extractor	Feb. 18, 1873	646	211	3	204
144, 866	Prescott, G. A., and J. Barsaloux, said Barsaloux assignor to said Prescott, Sandy Hill, N. Y. Head-block for saw-mill	Nov. 25, 1873	615	209	4	562
139, 329	Prescott, M. H., jr., La Crosse, Wis. Child's photograph chair	May 27, 1873	796	254	3	593
145, 310	Pressey, G. W., Hammonton, N. J. Umbrella	Dec. 9, 1873	250	83	4	618
	Prest, J. (See Taylor & Prest.)					
	Preston, C. (See Wygant, Preston & Westervelt.)					
140, 641	Preston, F. B., assignor to self and W. H. Stapleton, Fayette, Mo. Washing-machine	July 8, 1873	271	92	4	42
138, 818	Preston, J., Plymouth, Ohio. Corn-plow	May 13, 1873	323	100	3	534
137, 956	Preston, S. H., Worth, Pa. Bolt and rod cutter	Apr. 15, 1873	614	193	3	431
142, 412	Preston, W. M., Roxbury, N. Y. Door-bell	Sept. 2, 1873	79	26	4	249
	Prewitt, H. C. (See Harrison, W., assignor.)					
145, 815	Price, C. A., Jersey City, N. J. Rubber-mat for pitchers, &c.	Dec. 23, 1873	705	232	4	679
142, 582	Price, F. M. W., Danville, Ill. Machine for mining coal	Sept. 9, 1873	240	79	4	273
136, 866	Price, J., Columbia County, Fla. Combined stalk-cutter and land-roller	Mar. 18, 1873	467	155	3	301
134, 928	Price, J. S., Champaign County, and P. Miller, Clarke County, Ohio. Grain-register	Jan. 14, 1873	397	127	3	52
6, 338	Price, V., New York, N. Y. Sword hilt and scabbard..... (Design)	Jan. 7, 1873			3	7
6, 763	Price, V., Woodside, N. Y. Sword hilt and scabbard..... (Design)	July 8, 1873			4	36
6, 953	Price, V., New York, N. Y. Sword hilt and scabbard..... (Design)	Oct. 7, 1873			4	380
139, 023	Price, V., Woodside, N. Y. Casting ornaments for sword scabbards	May 20, 1873	507	159	3	562
137, 715	Price, W., Mount Olive, N. C. Cotton-chopper	Apr. 8, 1873	400	123	3	401
137, 716	Same..... Plow	Apr. 8, 1873	402	123	3	401
138, 043	Same..... Cotton-planter	Apr. 22, 1873	712	225	3	449
140, 841	Pridgeon, J. P., assignor to J. P. Pridgeon & Co., Marion Court-house, S. C. Cotton-press	July 15, 1873	443	151	4	64
	Pridgeon, J. P., and Co. (See Pridgeon, J. P., assignor.)					

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137, 147	Prier, A. (<i>See</i> Loeffelholz & Prier.)					
	Priest, C. W., assignor of one-half interest to J. W. Lamb, Troy, N. Y. Machine for beading sheet-metal vessels.	Mar. 25, 1873	721	{ 239 240 }	{ 3 }	333
	Priest, J. (<i>See</i> Colver & Priest.)					
	Priest, J. K., et al. (<i>See</i> Fullam, A. J., assignor)..... (Reissue.)					
	Same..... (<i>See</i> Smith, R. T., assignor.)					
144, 136	Priest, J. K., assignor to self, R. T. Smith, J. G. Blunt, and W. Earl, jr., Nashua, N. H. Shearing-machine.	Oct. 28, 1873	697	231	4	465
135, 727	Priew, H., Magdeburg, Prussia. Centrifugal machine for purifying sugar.	Feb. 11, 1873	316	100	3	164
	Prince, G. A. (<i>See</i> Kent, W. W., assignor.)					
136, 542	Prince, J., and N. D. Martin, North Craftsbury, Vt. Apparatus for cooling milk and cream.	Mar. 4, 1873	174	55	3	259
	Prindle, D. R., East Bethany, N. Y. Portable furnace boiler and steamer. (Extension) ..	Sept. 13, 1873			4	270
25, 442	Same..... same..... (Disclaimer filed) ..	Sept. 12, 1873			4	270
6, 793	Prindle, G. H., Philadelphia, Pa. Boa..... (Design) ..	Aug. 5, 1873			4	135
6, 794	Same..... same..... (Design) ..	Aug. 5, 1873			4	135
135, 585	Prindle, G. S., Washington, D. C., assignor to The Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringer.	Feb. 4, 1873	182	57	3	142
144, 134	Prindle, L. B., Bantam Falls, Conn. Wrench.	Oct. 28, 1873	695	230	4	465
140, 162	Prindle, L. C., Chicago, Ill. Billiard-table.	June 24, 1873	680	213	3	695
144, 135	Pritchard, E. D., New York, N. Y. Protection for underground telegraph-wires.	Oct. 28, 1873	695	231	4	465
140, 303	Pritchard, T., assignor of two-thirds interest to J. Laughlin and C. Darragh, Philadelphia, Pa. Device for connecting car-axles with axle-boxes.	June 24, 1873	796	253	3	705
137, 238	Pritz, A., Dayton, Ohio. Car-coupling.	Mar. 25, 1873	807	266	3	399
134, 561	Probasco, W., Lawrenceburgh, Ind. Centrifugal apparatus for extracting honey from the comb.	Jan. 7, 1873	56	17	3	11
143, 093	Procopé, M., Stockholm, Sweden. Adjustable tongue for organ-reeds.	Sept. 23, 1873	682	234	4	330
145, 011	Procter, J. K., Malden, Mass. Sewing-machine caster.	Nov. 25, 1873	730	246	4	572
142, 041	Proctor, A. N., assignor to J. Proctor, Boston, Mass. Motor for driving machinery.	Aug. 19, 1873	583	192	4	199
	Proctor, D. C. (<i>See</i> Culter & Proctor.)					
139, 608	Proctor, G. K., Salem, Mass. Caster for sewing-machines.	June 3, 1873	142	{ 46 47 }	{ 3 }	620
140, 074	Same..... Lapboard.	June 17, 1873	582	184	3	679
	Proctor, J. (<i>See</i> Proctor, A. N., assignor.)					
5, 493	Proctor, J. K., Philadelphia, Pa., assignor of one-half interest to C. R. Lindsay. Cylinder for burring-machines.	July 15, 1873	595	200	4	76
	Same..... Machine for working waste, fibrous material, &c.	June 3, 1873	142	{ 47 48 }	{ 3 }	620
137, 609	Proctor, J. K., Philadelphia, Pa. Mechanism for operating the doffer-combs of carding-machines.	June 24, 1873	796	253	3	705
	Proctor, J. W. (<i>See</i> Forbis, H. K., assignor.)					
142, 650	Prosser, T. T., assignor of one-half interest to G. C. Morgan, Chicago, Ill. Water-meter.	Sept. 9, 1873	294	97	4	277
145, 752	Prosser, T. T., Chicago, Ill. Connecting-rod.	Dec. 23, 1873	652	214	4	674
145, 753	Same..... Fan-blower.	Dec. 23, 1873	653	214	4	674
145, 754	Same..... Pegging-machine for boots and shoes.	Dec. 23, 1873	654	214	4	674
135, 843	Prosser, T. T., and G. W. Gillette, Chicago, Ill. Tool for facing bung-holes.	Feb. 11, 1873	421	137	3	172
137, 717	Prosser, T. T., and G. C. Morgan, Chicago, Ill. Pipe-joint.	Apr. 8, 1873	403	124	3	461
139, 813	Proudfoot, F., Toronto, Canada. Fire-place.	June 10, 1873	350	108	3	652
145, 237	Same..... Heating-drum.	Dec. 2, 1873	178	61	4	599
5, 664	Prouty, G. W., Charlestown, Mass. Printing-press. (Reissue) ..	Nov. 18, 1873	567	192	4	547
141, 077	Same..... Inking apparatus for oscillating printing-presses.	July 22, 1873	678	227	4	92
135, 665	Prouty, H. W., Boston, Mass. Lamp-chimney cleaner.	Feb. 11, 1873	263	83	3	160
141, 516	Same..... Toy money-box.	Aug. 5, 1873	93	29	4	142
	Providence Tool Company. (<i>See</i> Bartlett, E. G. W., assignor.)					
	Same..... (<i>See</i> Pickersgill, W. C., assignor.)					
140, 163	Provost, P. C., et al. (<i>See</i> Dewell, J. V., assignor.)					
134, 704	Pruden, H., Erie, Pa. Medical compound for diphtheria, &c.	June 24, 1873	680		3	695
	Prybil, P., New York, N. Y. Saw-guide.	Jan. 7, 1873	192	62	3	22
	Puder, G. (<i>See</i> Brand & Puder.)					
139, 734	Puffer, A. D., Boston, Mass. Soda-water fountain.	June 10, 1873	278	87	3	647
142, 413	Pugh, W. H., Chicago, Ill. Subterranean irrigation.	Sept. 2, 1873	80	26	4	249
	Pulis, C. (<i>See</i> Mowry & Pulis.)					
137, 718	Pullinger, C., Philadelphia, Pa. Flexible support for mattresses, seats, &c.	Apr. 8, 1873	404	124	3	401
142, 941	Same..... Ventilating window-sash.	Sept. 16, 1873	550	186	4	309
	Pullis, J. (<i>See</i> Pullis, T. R. & J.)					
138, 099	Pullis, T. R. & J., Saint Louis, Mo. Bolt mechanism for prison-doors.	Apr. 22, 1873	759	241	3	452
	Puntenney, G. H. (<i>See</i> Ochiltree, S. P., assignor.)					
	Purinton, J., Lynn, Mass. Machine for lasting boots and shoes. (Extension) ..	Oct. 4, 1873			4	353
144, 225	Purple, G., Cameron, Mo. Flour-sifter.	Nov. 4, 1873	48	14	4	482
137, 719	Pursell, A., Williamsport, Pa. Car-coupling.	Apr. 8, 1873	404	124	3	401
139, 610	Pursley, G. A., Pittsfield, Ill. Grain-drill.	June 3, 1873	146	48	3	621
	Pusey, H. (<i>See</i> Blessing, L. W., assignor.)					
137, 320	Pusey, J., Philadelphia, Pa. Rack for curtain-fixtures.	Apr. 1, 1873	38	12	3	360
143, 929	Pusey, J. M., Wilmington, Del. Thill-coupling.	Oct. 21, 1873	496	168	4	439
136, 543	Pusey, S. J., assignor to W. H. Grove, Philadelphia, Pa. Sewing-machine table.	Mar. 4, 1873	174	56	3	259
141, 169	Same..... Folding-cover for sewing-machines.	July 22, 1873	764	250	4	98
	Push, A. B. (<i>See</i> Thompson, C. G., assignor.)					
136, 937	Putequat, J. L., Brownsville, Tex. Medical compound.	Mar. 18, 1873	528		3	306
145, 510	Putnam, D., Stockton, assignor of one-half interest to A. C. Pickard, Busti, N. Y. Lifting-jack.	Sept. 2, 1873	169	55	4	255
143, 716	Putnam, G. W., South Glen's Falls, N. Y. Car-coupling.	Oct. 14, 1873	298	97	4	412
	Putnam, H. W., Bennington, Vt. Bottle-stopper fastening. (Extension) ..	Mar. 15, 1873			3	245
	Putnam, J. (<i>See</i> Tisdale, J., assignor.)					
	Same..... (<i>See</i> Tisdale, Putnam & Allen.)					
144, 226	Putnam, S. S., Boston, Mass. Machine for feeding horseshoe nails.	Nov. 4, 1873	48	15	4	482
144, 922	Same..... Machine for finishing horseshoe nails.	Nov. 25, 1873	656	{ 222 223 }	{ 4 }	565
145, 755	Same..... Nail-delivering machine.	Dec. 23, 1873	657	215	4	675
6, 764	Putnam, S. W., jr., Fitchburgh, Mass. Bolt-threading machine. (Design) ..	July 8, 1873			4	36
140, 727	Same..... Nut-tapping machine.	July 8, 1873	340	115	4	47
142, 511	Same..... Machine for tapping nuts.	Sept. 2, 1873	170	55	4	255
	Putnam, W. E., & Co. (<i>See</i> Putnam, W. E., assignor.)					
143, 186	Putnam, W. E., assignor to W. E. Putnam & Co., Boston, Mass. Gaiter.	Sept. 23, 1873	751	259	4	336
25, 673	Purinton, J., Lynn, Mass. Machine for lasting boots and shoes. (Disclaimer filed) ..	Sept. 27, 1873			4	354

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
141, 727	Pye, W. H. M., Brooklyn, N. Y. Hat-tip lining	Aug. 12, 1873	289	94	4	166
145, 238	Pyke, M. (See Rea, Pyke & Rennoe.)					
145, 682	Quackenbush, H. M., Herkimer, N. Y. Toy pistol	Dec. 2, 1873	179	62	4	599
144, 793	Same. Steam-generator	Dec. 16, 1873	581	191	4	656
	Quail, W. (See Buschmann, L., assignor.)					
	Quarles, F., Waco, Tex. Cotton-bale tie	Nov. 18, 1873	537	183	4	545
	Quarterman, E., et al. (See Quarterman, J., assignor.)					
	Quarterman, F. J. J., et al. (See Quarterman, J., assignor.)					
143, 841	Quarterman, J., Flushing, assignor to A. M. Ingersoll, Brooklyn, and F. J. J. and E. Quarterman, Flushing, N. Y. Paint-compound	Oct. 21, 1873	426		4	433
145, 311	Quast, E., Jerseyville, Ill. Plane-iron	Dec. 9, 1873	252	84	4	618
	Queen City Wringer Company. (See Bogert, T. O., assignor.)					
	Same. (See Cathcart, R. S., assignor.)					
	Same. same. (Reissue.)					
	Same. (See Gault & Winall, assignors.)					
	Same. (See Prindle, G. S., assignor.)					
141, 667	Quick, D. R., and G. A. Gardner, New York, N. Y. Steam hammer	Aug. 12, 1873	242	77	4	162
136, 181	Quigg, J. F., Chicago, Ill. Swing	Feb. 25, 1873	739	238	3	223
137, 957	Quigley, W. D. G., Spring Valley, N. Y. Tire-tightener	Apr. 15, 1873	614	193	3	431
	Quimby, E. E. (See Bancroft, L. F., assignor.)					
	Quinn, F., Keokuk, Iowa. Candy-cutter	Oct. 14, 1873	178	60	4	403
135, 938	Quinn, M., Galveston, Tex. Bale-tie	Feb. 18, 1873	513	167	3	193
136, 544	Quinby, A. P., assignor to W. A. Freeman, Newark, N. J. Oil-can	Mar. 4, 1873	175	56	3	259
143, 463	Quincke, L., Joliet, Ill., assignor of one-half interest to F. Mueller, Carondelet, Mo. Cupola and other furnaces	Oct. 7, 1873	56	19	4	385
140, 305	Quincy, E. W., assignor of one-half interest to J. H. Hall, Peoria, Ill. Corn-harvester	June 24, 1873	798	253	3	705
140, 387	Quincy, E. W., Peoria, Ill. Bed-bottom	July 1, 1873	45	15	4	11
	Quincy, G. H., et al. (See Morrison, C. F., assignor.)					
138, 433	Quirk, J. B., Philadelphia, Pa. Car-spring	Apr. 29, 1873	1,081	341	3	486
138, 930	Quirolo, A., New York, N. Y. Stereoscope	May 13, 1873	416	130	3	542
143, 252	Race, A. H. and J. H., Brooklyn, N. Y. Apparatus for preventing back-motion	Sept. 30, 1873	817	280	4	357
	Race, J. H. (See Race, A. H. and J. H.)					
	Same. (See Wright & Race.)					
140, 642	Racicot, A., Troy, N. Y. Medical compound for cholera	July 8, 1873	272		4	42
144, 137	Radway, S. H., Berlin, Wis. Windmill	Oct. 28, 1873	698	231	4	465
136, 263	Rae, M., Uphall, New Britain. Manufacture of fuel	Feb. 25, 1873	809	261	3	228
135, 045	Raeder, F. W., Saint Louis, Mo. Lime-kiln	Jan. 21, 1873	516	167	3	77
142, 866	Rafael, R., Havana, Cuba. Boiler-feeder	Sept. 16, 1873	486	166	4	304
	Raff, G. W., et al. (See Essick, S. V., assignor.)					
138, 434	Raftery, J. T., El Dara, Ill. Plow-handle	Apr. 29, 1873	1,082	341	3	486
137, 622	Ragan, C., Waterloo, Iowa. Dried-fruit looseners	Apr. 8, 1873	313	97	3	394
136, 545	Ragan, T., Philadelphia, Pa. Hydrant	Mar. 4, 1873	176	56	3	259
145, 239	Rager, C. B., assignor of one-half interest to H. Mills, North Manchester, Ind. Weather-strip	Dec. 2, 1873	180	62	4	599
136, 938	Rains, G. J., Aiken, S. C. Safety-valve	Mar. 18, 1873	529	175	3	306
139, 611	Rairigh, W. K., Plumville, Pa. Harvester	June 3, 1873	146	48	3	621
139, 612	Same. same.	June 3, 1873	147	48, 49	3	621
135, 844	Rakestraw, R., Wyoming, Ill. Bed-bottom	Feb. 11, 1873	422	137	3	172
139, 814	Same. Rotary harrow	June 10, 1873	351	109	3	653
142, 651	Ralph, A., Philadelphia, Pa. Packing-machine	Sept. 9, 1873	295	97	4	278
135, 586	Ralston, J., Brenham, Tex., assignor of part interest to D. S. Skinner, N. B. Hall, and E. J. Bicknell, Providence, R. I. Cotton-cleaner	Feb. 4, 1873	183	57	3	142
136, 761	Ralya, J. J., Cleveland, Ohio. Wheel for vehicles	Mar. 11, 1873	368	122	3	284
138, 762	Same. Stave-jointer	May 13, 1873	273	85	3	530
141, 816	Same. Device for centering barrel-heads	Aug. 12, 1873	372	122	4	173
144, 138	Same. Machine for dressing staves	Oct. 28, 1873	698	232	4	465
135, 845	Ramer, S., Winona, Minn. Grain-register	Feb. 11, 1873	422	137	3	172
	Ranney, D. S. (See Ackley & Ranney.)					
140, 075	Ramsay, G. M., New York, N. Y. Globe and holder for gas-burners	June 17, 1873	583	185	3	679
	Ramsay, J. (See Kirkhart & Ramsay.)					
134, 929	Ramsay, R., Irwin's Station, Pa. Car-wheel	Jan. 14, 1873	398	127	3	52
137, 570	Ramsay, W. C., Wadesborough, N. C. Cotton-bale tie	Apr. 8, 1873	273	84		
	Ramsdell, A. J. (See Goodsell, L. A., assignor.)					
136, 671	Ramus, C. E., Lawrence, Kans. Treating pine-leaves for use in the arts	Mar. 11, 1873	296		3	278
	Rand, A. C. (See Nutting & Githens, assignors.)					
137, 025	Rand, A. C., Aurora, Ill. Converting cast-iron into wrought-iron and steel	Mar. 18, 1873	603	200	3	312
138, 694	Same. Steam-boiler furnace	May 6, 1873	200	63	3	513
142, 118	Rand, E. K., Boston, Mass. Stocking-supporter	Aug. 26, 1873	669	220	4	216
	Rand, J. M. (See Anderson, H. L., assignor.)					
140, 306	Rand, J. Q., and J. F. McSherry, Baltimore, Md. Sofa	June 24, 1873	799	254	3	705
140, 307	Rand, O. B., Kalamazoo, Mich. Door-latch	June 24, 1873	800	254	3	705
144, 288	Same. same.	Nov. 4, 1873	97	32	4	486
	Randall, A. A. (See Randall, S. G., assignor.)					
	Randall, A. F., et al. (See Hunter, R. F., assignor.)					
136, 264	Randall, G. H., assignor to self and W. H. Woods, Forestville, Md. Combined atmospheric exhaust-pump and funnel	Feb. 25, 1873	811	262		228
	Randall, G. W., Boston, Mass. Faucet (Extension)	Apr. 5, 1873				
145, 240	Randall, S. B., Cincinnati, Ohio. Leather-creasing roller	Dec. 2, 1873	180	62	4	599
137, 026	Randall, S. G., assignor to A. A. Randall, Providence, R. I. Seeding-machine	Mar. 18, 1873	604	200	3	312
	Randle & Heath. (See Smith, J. B., assignor.)					
144, 923	Randol, J. B., and C. W. Wright, New Almaden, Cal. Process for purifying quicksilver	Nov. 25, 1873	658		4	566
144, 924	Randolph, J. F., Edwardsburgh, Mich. Revolving sample-case	Nov. 25, 1873	658	223	4	566
138, 931	Randolph, J. H., jr., Bayou Goula, La. Wheel-cultivator	May 13, 1873	417	131	3	542
141, 949	Randolph, L., Jerseyville, Ill. Millstone-dressing machine	Aug. 19, 1873	499	164	4	193
138, 435	Range, G., New York, N. Y. Sewing-machine cabinet	Apr. 29, 1873	1,082	342	3	486
143, 382	Ranger, B., and J. B. Smiley, Brattleborough, Vt. Bracelet-fastening	Sept. 30, 1873	934	316	4	366
140, 728	Rank, A., Salem, Ohio. Grave-guard	July 8, 1873	341	115	4	47
141, 668	Same. Harvester-rake	Aug. 12, 1873	243	77	4	163
	Rankin, A. (See Wilder, A. A., assignor.)					
137, 623	Rankin, A., Philadelphia, Pa. Hinge	Apr. 8, 1873	314	98	3	394
140, 539	Same. Speaking-tube	July 1, 1873	168	57	4	22
141, 381	Same. Master-key lock	July 29, 1873	979	318	4	123
140, 950	Rankin, H. P., Allegheny, Pa. Meat-chopper	July 15, 1873	548	184	4	72
135, 362	Rankin, J., Binghamton, N. Y. Corn-sheller	Jan. 28, 1873	810	{ 261 262 }	{ 3 3 }	{ 113, 113 }

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
143, 640	Rankin, J., Binghamton, N. Y. Mechanism for transmitting power.	Oct. 14, 1873	222	74, 75	4	407
145, 012	Same. Planing-machine.	Nov. 25, 1873	731	247	4	572
143, 299	Ranks, E. C., Boston, Mass. Reclining-chair.	Sept. 30, 1873	857	294	4	360
	Ranney, M. (See Johnson & Ranney.)					
139, 477	Ransom, A. F., Glen's Falls, N. Y. Bouquet-holder.	June 3, 1873	30	10	3	611
135, 155	Ransom, G. B., assignor to self and J. B. Clark, Chester, Conn. Coffin-plate.	Jan. 21, 1873	603	196	3	84
6, 726	Ransom, S. H., Albany, N. Y. Plates of cooking-stove.	June 24, 1873			3	691
6, 727	Same. same.	June 24, 1873			3	691
6, 728	Same. same.	June 24, 1873			3	691
6, 729	Same. same.	June 24, 1873			3	691
6, 730	Same. same.	June 24, 1873			3	691
6, 731	Same. same.	June 24, 1873			3	691
6, 732	Same. Plates of a parlor or heating stove.	June 24, 1873			3	691
6, 733	Same. same.	June 24, 1873			3	691
137, 095	Ransom, W. W., Buffalo, N. Y. Combined hose-pipe and sprinkler.	Mar. 25, 1873	677	225	3	329
145, 363	Ransome, E. L., San Francisco, Cal. Process of manufacturing artificial stone.	Dec. 9, 1873	292		4	621
142, 274	Rapp, B. R., assignor to self and W. H. Lawson, Westchester, Pa. Thill-coupling.	Aug. 26, 1873	797	263	4	227
5, 688	Rappleve, J. W., Farmer Village, N. Y. Constructing wire fences.	Dec. 16, 1873	613	201	4	659
136, 094	Same. Wire fence.	Feb. 18, 1873	647	212	3	204
142, 725	Rash, R. A., assignor of one-half interest to Tappey, Lumsden & Co., Petersburg, Va. Railway-switch stand.	Sept. 9, 1873	356	121	4	282
142, 726	Same. Straw-cutter.	Sept. 9, 1873	357	121	4	283
143, 383	Rasy, W., Remington, Ind. Comb-frame.	Sept. 30, 1873	935	317	4	366
142, 942	Ratelle, J. C., Rochester, N. Y. Knife for trimming boot and shoe soles.	Sept. 16, 1873	551	187	4	309
140, 643	Rathbone, C. D., Belpre, Ohio. Pump.	July 8, 1873	873	92	4	42
141, 170	Rathbone, R., New York, N. Y. Paper-file.	July 22, 1873	765	251	4	98
138, 582	Raub, D. C., Saint Louis, Mo. Bedstead.	May 6, 1873	102	33	3	506
137, 720	Raub, J. L., assignor to C. Parker, Meriden, Conn. Tool for capping cartridges.	Apr. 8, 1873	406	124	3	401
141, 459	Rawle, G., Bristol and W. N. Evans, Bedminster, England. Manufacture of leather.	Aug. 5, 1873	45		4	139
141, 890	Rawson, A., Des Moines, Iowa. Furnace-grate bar.	Aug. 19, 1873	452	147	4	189
138, 044	Rawson, D. W., Croydon, N. H. Clothes-pounder.	Apr. 22, 1873	713	225	3	449
140, 729	Rawson, G. W., Cambridgeport, assignor to self and M. Hittinger, Somerville, Mass. Upright steam-boiler.	July 8, 1873	342	116	4	47
	Ray, B., et al. (See Harris, S. W., assignor.)					
	Same. (Reissue.)					
142, 652	Ray, D. B., New York, N. Y. Apparatus for arranging type for type-setting machines.	Sept. 9, 1873	297	97, 98	4	278
	Ray, G. O. (See Jonas, F., assignor.)					
138, 160	Ray, G. R., Bridgeport, Conn. Machine for dressing stone.	Apr. 22, 1873	760	241	3	453
6, 584	Ray, J. S., East Haddam, Conn. Coffin-handle socket.	Apr. 8, 1873			3	387
6, 592	Same. same.	Apr. 15, 1873			3	417
6, 734	Same. same.	June 24, 1873			3	691
137, 958	Same. same.	Apr. 15, 1873	615	194	3	431
	Ray, S., and M. R. Shalters, Alliance, Ohio. Harvester.	Apr. 19, 1873			3	416
	Same. same.	Apr. 19, 1873			3	416
	Rayburn, J., et al. (See Fordem, J. M., assignor.)					
	Same. (See Gross, E. L., assignor.)					
142, 042	Rayer, W. A., (See Lincoln & Rayer.)					
139, 189	Rayer, W. A., and W. S. Lincoln, Boston, Mass. Sewing-machine.	Aug. 19, 1873	584	192	4	199
	Raymond, A., Waupun, Wis. Wind-wheel.	May 20, 1873	664	208	3	574
	Raymond, J. (See Chamness & Vaughn, assignors.)					
145, 125	Raymond, J. P., Cincinnati, Ohio. Paper-bag machine.	Dec. 2, 1873	80	25, 26	4	592
145, 683	Raymond, L. F., Bordeaux, France. Portfolio.	Dec. 16, 1873	582	191	4	656
138, 284	Raynard, J. H. & B. W., and W. P. Hatch, Boston, Mass. Universal joiner.	Apr. 29, 1873	949	299	3	476
136, 546	Rayney, J., Brooklyn, N. Y., and W. Cairns, Jersey City, N. J., assignors to J. Rayney, Brooklyn, N. Y. Baker's oven.	Mar. 4, 1873	177	56, 57	3	259
144, 139	Rea, B. F., M. Pyke, and D. M. Rennoe, said Pyke assignor to said Rea and Rennoe, South Bend, Ind. Boring-machine.	Oct. 28, 1873	700	232	4	466
136, 384	Rea, F., Gloucester, N. J. Shuttle-binder.	Mar. 4, 1873	29	11	3	248
136, 457	Read, D., New York, N. Y. Tobacco-pouch.	Mar. 4, 1873	88	30	3	253
138, 932	Read, H. F., assignor of one-half interest to E. Beach, Brooklyn, N. Y. Wrench.	May 13, 1873	418	131	3	542
142, 727	Read, J. A., Enfield, near Sydney, New South Wales. Distant-heat indicator.	Sept. 9, 1873	358	121	4	283
144, 634	Read, J. M., Boston, Mass. Stove-pipe damper.	Nov. 18, 1873	405	136	4	534
144, 925	Read, R. F., San Francisco, Cal. Road-scraper.	Nov. 25, 1873	659	223	4	566
139, 261	Read, W., jr., Cambridge, assignor to W. Read, Boston, Mass. Inkstand.	May 27, 1873	740	235	3	588
135, 487	Read, W. S., Oakland, Cal. Black-board eraser.	Feb. 4, 1873	87	27	3	134
	Reading Hardware Manufacturing Company. (See Griscom, W. M., assignor.)					
142, 728	Reagan, W. J., assignor to Royer's Ford Iron Foundry, Royer's Ford, Pa. Mode of and apparatus for varnishing sad-irons, and other articles.	Sept. 9, 1873	261	122	4	283
135, 846	Reames, J. M., Oxford, N. C. Machine for distributing fertilizers.	Feb. 11, 1873	424	138	3	172
138, 193	Same. Machine, for recessing tobacco-boxes.	Apr. 22, 1873	843	266	3	459
137, 959	Reams, C. F., Raleigh, N. C. Cotton-cultivator.	Apr. 15, 1873	616	194	3	431
134, 930	Reamy, T. J., Tarborough, N. C. Truck for moving buildings.	Jan. 14, 1873	399	127	3	52
137, 960	Rearden, J., assignor to S. W. Fowler, Brooklyn, N. Y. Towel-rack.	Apr. 15, 1873	617	194	3	432
144, 289	Reber, J., Nebraska, Ohio. Blackboard.	Nov. 4, 1873	98	33	4	486
5, 444	Rebstock, C., and J. Ottner, Bridgeport, Conn., assignors by mesne assignment to the Bridgeport Electro-Casting Company. Mold for casting knobs.	June 10, 1873	383	119	3	655
	Same. Door-knob.	June 10, 1873	384	119	3	656
134, 931	Rebstock, C., and J. Ottner, Bridgeport, Conn. Molds for casting metal knobs.	Jan. 14, 1873	400	128	3	52
143, 253	Reddick, W. A., Niles, Mich. Harness-pad.	Sept. 30, 1873	818	280	4	357
145, 684	Reder, L., Wilmington, Del. Tool-holder for lathes.	Dec. 16, 1873	583	191	4	656
141, 589	Redfearn, E., Philadelphia, Pa. Loom-shedding mechanism.	Aug. 5, 1873	152	49	4	147
139, 972	Redfern, S., Churchville, N. Y. Spike.	June 17, 1873	490	155	3	671
	Redheffer, J., jr., et al. (See Redheffer, J., assignor.)					
	Redheffer, J., jr. (See Redheffer, W. J., jr., & T. G., and Smith.)					
135, 847	Redheffer, J., Philadelphia, Pa., assignor to W. & J., jr., and T. G. Redheffer, of Kansas City, Mo. Tin-can soldering-machine.	Feb. 11, 1873	425	138	3	172
136, 265	Redheffer, J., Kansas City, Mo. Machine for holding and soldering cans.	Feb. 25, 1873	812	262	3	229
	Redheffer, T. G., et al. (See Redheffer, J., assignor.)					
	Redheffer, T. G. (See Redheffer, W. J., jr., & T. G., and Smith.)					
	Redheffer, W., et al. (See Redheffer, J., assignor.)					
137, 027	Redheffer, W. J., jr., & T. G., Kansas City, Mo., and L. A. Smith, Pawnee, Kans., said Smith assignor to W. J., jr., and T. G. Redheffer. Machine for holding and soldering cans.	Mar. 18, 1873	605	200	3	312
	Redway & Burton. (See Redway, A. J., assignor.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
135, 587	Redway, A. J., assignor to Redway & Burton, Cincinnati, Ohio. Lining for fire-places.	Feb. 4, 1873	185	57	3	142
137, 148	Reed, A., assignor of one-half interest to W. T. Cooley, Chicago, Ill. Extension-table.	Mar. 25, 1873	722	240	3	333
	Reed & Barton. (See Brabrook, G., assignor.)					
	Same..... (See Gill, G., assignor.)..... (Design.)					
135, 156	Reed, B. D., Westfield, Mass. Butter-knife rest	Jan. 21, 1873	604	196	3	84
136, 762	Reed, C. W., Chagrin Falls, Ohio. Sewing-machine cover	Mar. 11, 1873	370	{ 122 123 }	{ 3	284
	Reed, D. A., et al. (See Gray, L. N. B., assignor.)					
136, 763	Reed, G. A., New York, N. Y. Head-lining for barrels	Mar. 11, 1873	370	123	3	284
145, 241	Reed, G. D., assignor of two-thirds interest to J. E. Graves and W. Bailey, Springfield, Vt. Guitar	Dec. 2, 1873	181	62	4	599
139, 735	Reed, G. P., Malden, Mass. Stem winding and setting watch	June 10, 1873	279	87	3	647
138, 528	Reed, G. P., and H. B. Day, Malden, Mass. Combined watch-key and screw-driver	May 6, 1873	55	19	3	502
139, 613	Reed, G. W., Middlesex, Pa. Dumping-apparatus	June 3, 1873	147	49	3	621
144, 140	Reed, H. J. O., Salem, Mass. Floor-clamp	Oct. 28, 1873	701	232	4	466
141, 460	Reed, H. O., Boston, Mass. Screw-cutting machine	Aug. 5, 1873	46	14	4	139
142, 813	Same..... Table for sawing-machines	Sept. 16, 1873	443	150	4	300
140, 644	Reed, J. A., Dunellen, N. J. Nut-lock	July 8, 1873	273	92	4	42
137, 149	Reed, J. J., Lyons, Iowa. Can-opener	Mar. 25, 1873	723	240	3	333
142, 943	Reed, J. V., New Albany, Ind. Car-coupling	Sept. 16, 1873	552	187	4	309
135, 289	Reed, J. W., Careyville, Mo. Plow	Jan. 28, 1873	743	240	3	107
139, 815	Reed, L., Allegheny, Pa. Washing-machine	June 10, 1873	352	109	3	653
139, 736	Reed, N. F., North-Wolcott, Vt. Washing-machine	June 10, 1873	282	87	3	647
144, 476	Reed, S., Liberty, Pa. Car-coupling	Nov. 11, 1873	262	88	4	511
136, 266	Reed, S. H., and T. Thompson, Fredericktown, Ohio. Harvester-cutter	Feb. 25, 1873	813	262	3	229
144, 794	Reed, T. L., and E. F. Phillips, Providence, R. I. Insulating and finishing compound for conducting-wires	Nov. 18, 1873	538		4	545
140, 540	Reeder, C. V., San José, Cal. Bed-bottom	July 1, 1873	168	57	4	22
135, 009	Reeder, O., Baltimore, Md. Windless	Jan. 21, 1873	483	155	3	74
140, 730	Rees, J. S., Phillipsburgh, N. J. Puddling-furnace door	July 8, 1873	342	116	4	47
142, 867	Reese, A., Pittsburgh, Pa. Railway-car stove	Sept. 16, 1873	487	166	4	304
136, 267	Reese, A., and J., Pittsburgh, Pa. Machine for corrugating sheet-iron	Feb. 25, 1873	813	262	3	229
	Reese, A. R. (See Shireman, J. H., assignor.)					
	Reese, C. M. (See Reese, E., assignor.)					
135, 363	Reese, E., assignor to C. M. Reese, Entaw, Ala. Plow	Jan. 28, 1873	812	262	3	113
137, 796	Reese, E., Mahanoy City, Pa. Steam-pump and condenser	Apr. 15, 1873	481	150	3	420
137, 721	Reese, F., Calera, Ala. Broom	Apr. 8, 1873	406	125	3	401
144, 699	Reese, G. F. C., Brooklyn, assignor of one-half interest to R. R. Sinclair, New York, N. Y. Method of fastening artificial teeth	Nov. 18, 1873	460	156	4	538
	Reese, J. (See Reese, A., and J.)					
	Reese, T. H., et al. (See Furguson, W., assignor.)					
	Reeve, A. (See Tunison & Reeve.)					
142, 814	Reeve, T., Brooklyn, N. Y. Belt-shifting mechanism for planers and lathes	Sept. 16, 1873	443	150	4	300
	Reeves, D., et al. (See Clark, T. C., assignor.)					
142, 583	Reeves, J., Cincinnati, Ohio. Coupling for connecting cradles to rocking-chairs	Sept. 9, 1873	241	79	4	273
138, 529	Reeves, S. H., New York, N. Y. Spring bed-bottom	May 6, 1873	56	19	3	502
	Reeves, W. H. (See Way, T. R., assignor.)					
138, 436	Regan, H. W., Renovo, Pa. Lubricator	Apr. 29, 1873	1,083	342	3	486
142, 350	Register, J., and W. H. Bowen, Baltimore, Md. Stop-cock	Sept. 2, 1873	25	10	4	244
5, 260	Rehfuss, G., assignor to American Button-Hole and Overseaming Sewing-machine Company, Philadelphia, Pa. Sewing-machine	Jan. 28, 1873	845	{ 272 273 }	{ 3	115
	Same..... same..... (Design)	Jan. 28, 1873				
6, 375	Same..... same.....	Jan. 28, 1873			3	100
137, 028	Same..... same.....	Mar. 18, 1873	607	201	3	312
139, 421	Same..... Shuttle for sewing-machines	May 27, 1873	882	283	3	600
	Reichert, G. A., jr., et al. (See Shoemaker, D., assignor.)					
	Reichert, J. H., et al. (See Shoemaker, D., assignor.)					
138, 345	Reichardt, P. H., & M. Schnapp, Brunswick, Mo. Automatic-fan	Apr. 29, 1873	1,004	316	3	480
141, 171	Reid, A., assignor to self and W. Reid, New York, N. Y. Self-closing hatchway	July 22, 1873	765	251	4	98
139, 816	Reid, A. H., Brandywine Manor, Pa. Scraper	June 10, 1873	353	109	3	653
145, 242	Same..... Curry-comb	Dec. 2, 1873	182	63	4	600
141, 817	Reid, C. H., Danbury, Conn. Lathe-chuck	Aug. 12, 1873	373	122	4	173
142, 043	Same..... Button-fastening	Aug. 19, 1873	586	192	4	199
	Reid, L. (See Phillips & Reid.)					
141, 728	Reid, S., Chicago, Ill. Balance slide-valve	Aug. 12, 1873	290	95	4	166
	Reid, W. (See Reid, A., assignor.)					
135, 848	Reiff, W. H., Philadelphia, Pa. Show-case	Feb. 11, 1873	426	138	3	172
143, 464	Reifschneider, F., New York, N. Y. Picture-frame	Oct. 7, 1873	57	20	4	385
145, 447	Reigart, J. F., assignor to self and E. N. Darling, Washington, D. C. Endless driving-belt	Dec. 9, 1873	363	121	4	627
145, 685	Reiling, A., Bellevue, Iowa. Bridge	Dec. 16, 1873	583	191	4	657
139, 079	Reilly, J. O., Jersey City, N. J., assignor of one-half interest to H. M. Martin, New York, N. Y. Hand-punch and cutting-nippers	May 20, 1873	561	176	3	566
145, 126	Reilly, W., Newark, N. J. Extensible-brace for supporting trenches	Dec. 2, 1873	82	27	4	592
143, 419	Rein, J., & J. Stock, New York, N. Y. Bullet	Oct. 7, 1873	22	9	4	382
144, 795	Reinemer, W., Homburg, Prussia. Wash-boiler	Nov. 18, 1873	539	183	4	545
136, 095	Reiner, H. F., Blairsville, Pa., assignor to self and F. Lofink, Pittsburgh, Pa. Bottle-stopper	Feb. 18, 1873	648	212	3	204
	Reiners, J., et al. (See Buckner, C., assignor.)					
	Reinhardt, C. (See Cyrani & Reinhardt.)					
143, 330	Reinhart, J., New York, N. Y. Hobby-horse	Oct. 21, 1873	497	168	4	439
138, 285	Reinig, J., Fond du Lac, Wis. Wash-boiler	Apr. 29, 1863	953	300	3	476
136, 385	Reinking, C. D., Des Moines, Iowa. Wash-boiler attachment	Mar. 4, 1873	30	11	3	248
	Reinoehl, J., jr. (See Melinger, C. K., assignor.)					
140, 842	Rembert, S. S., Memphis, Tenn. Pencil-case	July 15, 1873	444	151	4	64
135, 488	Remhof, C., Brooklyn, N. Y. Combined tobacco-box and match-box	Feb. 4, 1873	88	27	3	134
	Remington, E., & Sons. (See Elliot, W. H., assignor.)..... (Reissue.)					
	Same..... (See Richardson, J. C., assignor.)					
	Same..... (See Smoot, W., assignor.)					
144, 227	Remington, G. H., B. D. Thayer, and J. P. Manton, Providence, R. I. Ship's windlass	Nov. 4, 1873	52	16	4	482
145, 686	Renaud, E., Washington, D. C. Welding copper	Dec. 16, 1873	584		4	657
135, 588	Render, F., Etchells, England. Flour-bolt	Feb. 4, 1873	185	58	3	142
	Renevey, A. (See Tailbouis & Renevey.)					
138, 933	Reniff, A. B., Bingham's Mills, N. Y. Water-wheel	May 13, 1873	419	131	3	542
6, 807	Reniff, R., Bloomington, Ill. Safety-stirrup	Aug. 19, 1873			4	185
141, 461	Renker, L., Hoboken, N. J. Device for locking drawers	Aug. 5, 1873	47	14	4	139
	Rennoe, D. M. (See Rea, Pyke, & Rennoe.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette	
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143, 842	Renshaw, D., Philadelphia, Pa. Sectional steam-generator	Oct. 21, 1873	426	142	4	433
143, 843	Same..... same.....	Oct. 21, 1873	427	142	4	433
143, 844	Same..... same.....	Oct. 21, 1873	428	143	4	433
143, 845	Same..... same.....	Oct. 21, 1873	429	143	4	433
143, 846	Same..... Superheater	Oct. 21, 1873	430	143	4	433
136, 617	Renshaw, G. P., Park Valley, England. Hydraulic railway-brake.....	Mar. 11, 1873	248	84	3	274
138, 934	Rensink, J. D., Bridgeport, N. J. Potato-digger.....	May 13, 1873	420	131	3	542
138, 530	Renton, G., Boston, assignor to C. H. Isburgh, Melrose, Mass. Harness.....	May 6, 1873	57	19	3	502
	Renwick, H. B. (See Worthen & Renwick)..... (Extension.)					
139, 973	Replogle, M., Moulton, Iowa. Hopper for grinding-mills.....	June 17, 1873	491	155	3	671
136, 547	Replogle, S. B., Roaring Springs, Pa. Car-coupling.....	Mar. 4, 1873	178	57	3	259
142, 815	Same..... same.....	Sept. 16, 1873	444	150	4	300
139, 817	Ressler, B. W. S., & C. H. Tipton, assignors to selves and R. C. Cheeseman, Hagerstown, Md. Harvester.....	June 10, 1873	354	109	3	653
	Ressler, C. H. (See Ressler, B. W. S. and C. H.)					
139, 190	Restell, T., Birmingham, England. Breech-loading fire-arm	May 20, 1873	665	208	3	575
143, 420	Retowsky, R. R., Baltimore, Md. Apparatus for cleaning privies, sinks, &c.....	Oct. 7, 1873	23	9	4	382
142, 512	Reuter, C., Cincinnati, Ohio. Printer's rule.....	Sept. 2, 1873	171	55	4	255
	Reynders, J., et al. (See Leiter, J., assignor.)					
	Reynolds & Reynolds. (See Reynolds, L., assignor.)					
135, 728	Reynolds, C. H., assignor to self and H. C. Richardson, Williamsburgh, N. Y. Self-closing hatch	Feb. 11, 1873	317	101	3	164
143, 641	Reynolds, D., Prospect, Md. Cotton and hay press	Oct. 14, 1873	224	75	4	407
145, 243	Reynolds, D. M., Port Deposit, Md. Gas-extinguisher.....	Dec. 2, 1873	182	63	4	600
144, 796	Reynolds, L., assignor to Reynolds & Reynolds, Dayton, Ohio. Lithographic printing-form	Nov. 18, 1873	540	183	4	545
142, 729	Reynolds, L. S., Minneapolis, Minn. Middlings-purifier	Sept. 9, 1873	362	122	4	283
140, 951	Reynolds, R. C., Lawrence, Mass. Apparatus for producing intermittent rotative movements.....	July 15, 1873	549	184	4	72
138, 935	Reynolds, S., Allegheny, Pa. Snap-hook	May 13, 1873	421	132	3	542
139, 614	Reynolds, S., Pierrepont Manor, N. Y. Hoisting-machine	June 3, 1873	142	49	3	621
145, 013	Reynolds, T. J., Irvington, Ill. Railway-switch.....	Nov. 25, 1873	733	247	4	592
138, 583	Reynolds, W. H., New Orleans, La. Cotton-press.....	May 6, 1873	103	33	3	506
142, 730	Rhind, F., Brooklyn, N. Y. Lamp.....	Sept. 9, 1873	363	122	4	283
145, 590	Rhineland, F. W., New York, N. Y. Boot and shoe tip	Dec. 16, 1873	502	165	4	650
141, 950	Rhoades, L., assignor of one-half interest to W. E. Clarke, Providence, R. I. Stopper for bottles	Aug. 19, 1873	500	165	4	193
138, 286	Rhoads, T., Ottawa, Ill. Horse hay-fork	Apr. 29, 1873	953	300	3	476
	Rhode Island Horseshoe Company. (See Perkins, C. H., assignor.)					
	Rhodes, D. H. (See Bannih & Rhodes.)					
134, 770	Rhodes, E., jr., Clyde, Ohio. Reaction pump	Jan. 14, 1873	258	84	3	41
	Rhodes, J. T., trustee. (See Vanstone, S., assignor.)					
	Rhodes, N. B. (See Sinclair, J. D., assignor.)..... (Reissue.)					
135, 290	Rhodes, W. E., Darlington Court-House, South Carolina. Cotton-planter.....	Jan. 28, 1873	744	240	3	107
	Rhorer, G., et al. (See Rigby, J., assignor.)					
	Rice, B. A. (See Thompson & Rice.)					
	Rice, Barton & Fales Machine and Iron Company. (See Fales, J. E., assignor.)					
	Rice, C. J. (See Nye, S. R., assignor.)					
141, 818	Rice, D., Richfield, Ill. Bee-hive.....	Aug. 12, 1873	374	122	4	173
134, 771	Rice, D. H., Lowell, Mass. Spindle for spinning-machines	Jan. 14, 1873	259	85	3	41
135, 939	Same..... same.....	Feb. 18, 1873	513	167	3	193
	Rice, G. (See Rice, W. A. & G.)					
137, 096	Rice, G. F., Worcester, Mass. Collar	Mar. 25, 1873	678	225	3	329
137, 722	Rice, G. H., Norwalk, Conn. Blacking-case.....	Apr. 8, 1873	407	125	3	401
	Rice, J. (See Hunter & Rice.)					
142, 275	Rice, J., Buffalo, N. Y. Ponton for raising sunken vessels	Aug. 26, 1873	798	263	4	227
139, 262	Rice, J. F., Fitchburgh, Mass. Hanging signal-cords of railway-cars	May 27, 1873	740	235	3	588
143, 300	Rice, O. P., New York, N. Y. Vehicle axle-box	Sept. 30, 1873	858	294	4	361
137, 864	Rice, S. W., Roseburgh, Oreg. Animal cage-trap	Apr. 15, 1873	538	167	3	425
142, 584	Rice, T., Boston, Mass. Splitting-gage.....	Sept. 9, 1873	242	79	4	273
139, 615	Rice, W., Fitchburgh, Mass. Cider-mill.....	June 3, 1873	149	49	3	621
139, 616	Rice, W. A., Bristol, N. H. Machine for cutting webbing	June 3, 1873	150	50	3	621
143, 717	Rice, W. A. & G., Framingham, Mass. Map exhibitor and cabinet.....	Oct. 14, 1873	298	98, 99	4	413
139, 918	Rice, W. E., & J. Barnes, Brooklyn, N. Y. Wash-boiler attachment	June 17, 1873	452	140	3	668
	Rice, W. M. (See Gregory, C. A., assignor.)					
142, 119	Rich, G. H., Geneva, Ill. Machine for separating cockle, &c., from wheat	Aug. 26, 1873	670	220	4	216
	Rich, H. (See Choat & Rich.)					
	Rich, J. J. (See Lee, J., assignor.)					
	Rich, J. J., et al. (See Smith & Lee, assignors.)					
136, 268	Rich, P. S., Avalanche, Wis. Wagon body and seat	Feb. 25, 1873	814	263	3	229
143, 187	Richard, E. O., Quebec, Canada, assignor of one-half interest to J. E. Richard, Columbia, S. C., and J. C. Richard, Quebec, Canada. Car-brake	Sept. 23, 1873	751	260	4	336
	Richard, J. C., et al. (See Richard, E. O., assignor.)					
	Richard, J. E., et al. (See Richard, E. O., assignor.)					
138, 194	Richard, J. E., Columbia, S. C. Belt-fastening	Apr. 22, 1873	843	267	3	459
	Richards & Fox. (See Luther, J., assignor.)					
136, 867	Richards, A. W., Indianola, Iowa. Perambulator	Mar. 18, 1873	468	155	3	301
142, 731	Richards, E. G., Detroit, Mich. Cutter-head for planing-machines	Sept. 9, 1873	364	123	4	283
142, 044	Richards, F. H., New Britain, Conn. Machine for forging horseshoe-nails.....	Aug. 19, 1873	586	192	4	199
144, 926	Same..... Door-spring.....	Nov. 25, 1873	660	224	4	566
	Richards, G. (See Richards, J. & G.)					
	Richards, G. H. (See Curtis, D., assignor.)..... (Reissue.)					
	Richards, G. H., et al. (See Curtis, D., assignor.)..... (Reissue.)					
137, 483	Richards, H. A., Chicago, Ill. Fire-escape.....	Apr. 1, 1873	184	58	3	372
	Richards, H. S., et al. (See Steel, R., assignor.)					
143, 531	Richards, J., Philadelphia, Pa. Gaining-machine.....	Oct. 7, 1873	115	39	4	390
144, 411	Same..... Tenoning-machine.....	Nov. 11, 1873	209	70	4	507
143, 254	Richards, J. & G., Philadelphia, Pa. Apparatus for collecting and transporting grain and other materials	Sept. 30, 1873	819	281	4	357
143, 931	Richards, J., and J. Meehl, Philadelphia, Pa. Spark-arrestor.....	Oct. 21, 1873	498	168	4	439

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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143, 532	Richards, J., and L. H. Berry, Philadelphia, Pa. Tenoning-machine.....	Oct. 7, 1873	116	39	4	390
	Richards, J. S., <i>et al.</i> (See Steel, R., assignor.)					
135, 489	Richards, L. H., Rising Sun, Md. Hand corn-planter	Feb. 4, 1873	88	28	3	134
135, 589	Richards, P. W., Boston Highlands, Mass. Stuffing-box for piston-rods, &c.....	Feb. 4, 1873	186	58	3	142
139, 422	Richards, W., Birmingham, England. Breech-loading fire-arm	May 27, 1873	883	284	3	600
136, 939	Richardson, C. P., Groveton, N. H. Grindstone trough and support.....	Mar. 18, 1873	530	175	3	306
145, 687	Richardson, E. F., assignor to G. A. Richardson, Reading, Mass. Sewing-machine	Dec. 16, 1873	584	192	4	657
136, 386	Richardson, F. B., Boston, Mass. Device for agitating salt in cruets.....	Mar. 4, 1873	31	11	3	248
142, 276	Richardson, F. G., Brooklyn, N. Y. Turpentine-filter.....	Aug. 26, 1873	799	264	4	227
137, 239	Richardson, G., Lowell, Mass. Spindle-bolster.....	Mar. 25, 1873	808	266	3	339
143, 785	Same.....	Oct. 21, 1873	378	125	4	429
	Richardson, G. A. (See Richardson, E. F., assignor.)					
	Richardson, G. R. (See Behel, J., assignor.)					
139, 478	Richardson, G. R., Earlville, and J. Behel, Rockford, Ill. Cultivator	June 3, 1873	31	10	3	611
140, 952	Richardson, G. R., Earlville, Ill. Railway-tie.....	July 15, 1873	550	184	4	72
136, 618	Richardson, G. W., Troy, N. Y. Relief-valve for locomotives	Mar. 11, 1873	250	84	3	274
136, 619	Same..... Exhaust-nozzle for locomotives	Mar. 11, 1873	251	84	3	275
141, 078	Richardson, G. W., Columbus, Ky. Sash-holder	July 22, 1873	679	227	4	92
145, 591	Richardson, G. W., assignor to B. and G. H. Starbuck, Troy, N. Y. Feed-water heater ...	Dec. 16, 1873	503	165	4	650
	Richardson, H. C. (See Reynolds, C. H., assignor.)					
143, 421	Richardson, H. M., Boston, Mass. Child's carriage	Oct. 7, 1873	23	9	4	352
	Richardson, J. (See Richardson, J. D., assignor.)					
140, 164	Richardson, J. and T. D., New York, N. Y. Gas-burner	June 24, 1873	680	214	3	695
140, 165	Same..... Gas-pipe and fixtures.....	June 24, 1873	681	214	3	695
142, 120	Same..... Cocks for controlling discharge through two pipes.....	Aug. 26, 1873	671	221	4	216
136, 620	Richardson, J. C., New Haven, Conn. Machine for rolling carriage-axles.....	Mar. 11, 1873	252	85	3	275
143, 094	Richardson, J. C., Philadelphia, Pa., assignor of one-half interest to E. Remington & Sons, Illion, N. Y. Machine for rolling sword-blades.....	Sept. 23, 1873	683	235	4	330
145, 526	Richardson, J. C., Philadelphia, Pa. Machine for rolling carriage-axles.....	Sept. 16, 1873	451	{ 147 148 342 343 }	{ 4 3 }	{ 645 487 }
138, 437	Richardson, J. D., assignor to self, I. C. Lord, and M. G. Howe, Houston, Tex. Record- } ing-instrument for locomotives..... }	Apr. 29, 1873	1,084	{ 342 343 }	{ 3 3 }	{ 487 487 }
138, 438	Richardson, J. D., Houston, Tex., assignor to self and J. Richardson, Cincinnati, Ohio. Carriage-spring	Apr. 29, 1873	1,086	343	3	487
139, 080	Richardson, J. H., assignor of one-half interest to D. Hardie, Philadelphia, Pa. Chimney-cowl	May 20, 1873	561	176	3	566
135, 157	Richardson, J. J., Marion, S. C. Truck-barrow	Jan. 21, 1873	604	196	3	84
141, 891	Richardson, J. J., Brooklyn, N. Y. Grate for stoves and furnaces.....	Aug. 19, 1873	453	148	4	189
5, 665	Richardson, J. R., Max Meadows, Va. Locomotive-wheel	Nov. 18, 1873	568	192	4	548
	Richardson, J. W. (See Arnaud, J. J., assignor.)					
	Richardson, L. (See Chinnock, G. H., assignor.)					
140, 434	Richardson, L. B., Carrollton, Ill. Plow	July 1, 1873	76	27	4	14
136, 672	Richardson, L. T., Auburn, N. Y. Die for forging hoe-plates	Mar. 11, 1873	297	99	3	278
141, 951	Richardson, L. W., Roscoe, Ill. Wheel-plow.....	Aug. 19, 1873	501	165	4	193
	Richardson, T. D. (See Richardson, J. and T. D.)					
137, 865	Richardson, T. D., North Providence, R. I. Motor-engine	Apr. 15, 1873	539	168	3	425
	Richardson, W. A. (See Richardson, W. W., assignor.)					
142, 868	Richardson, W. D., Pawtucket, R. I. Painted cloth-cover	Sept. 16, 1873	488	166	4	304
135, 490	Richardson, W. H., Stillwater, Minn. Device for pitching boats	Feb. 4, 1873	89	28	3	134
140, 645	Richardson, W. H., Fort Smith, Ark. Stitching-gauge for the blind	July 8, 1873	274	93	4	42
	Richardson, W. W. (See Munroe, F. B., assignor.)					
141, 952	Richardson, W. W., Ypsilanti, Mich. Whip-socket fastener	Aug. 19, 1873	502	165	4	193
141, 953	Richardson, W. W., assignor to self and W. A. Richardson, Ypsilanti, Mich. Whip-socket fastening	Aug. 19, 1873	502	165	4	193
	Richman, H. C. (See Peck & Richman.)					
145, 899	Richmond, A. K., Boston, Mass. Derrick	Dec. 23, 1873	780	255	4	684
145, 448	Richter, E. H., Taunton, Mass. Composition for fire-brick, stove-lining, &c	Dec. 9, 1873	364	.....	4	627
145, 449	Same..... Apparatus for granulating zinc	Dec. 9, 1873	365	121	4	627
145, 450	Richter, E. H. and F. G., Taunton, Mass. Zinc-furnace	Dec. 9, 1873	365	122	4	627
	Richter, F. G. (See Richter, E. H. and F. G.)					
135, 364	Richter, W., Eintrachtshuette, Germany. Machine for breaking metal bars.....	Jan. 28, 1873	813	{ 262 263 }	{ 3 3 }	{ 113 459 }
138, 195	Rick, A. F., Chicago, Ill. Cooler for beer	Apr. 22, 1873	844	267	3	459
145, 816	Rickards, J. B., Kilburn, assignor to G. F. Lyde, Manchester, England. Bleaching damaged cotton	Dec. 23, 1873	706	.....	4	679
135, 729	Rickart, A., Schoharie, N. Y. Harvester	Feb. 11, 1873	318	101	3	165
138, 196	Ricker, C. H., Dover, N. H. Plow-boot	Apr. 22, 1873	845	267	3	459
144, 141	Rickets, W., Cincinnati, Ohio. Hydraulic cushion for water-pipes.....	Oct. 28, 1873	701	233	4	466
	Ricketts, D., <i>et al.</i> (See Stephenson, W. O., assignor.)					
	Riddel, T. E. (See Arnaud, J. J., assignor.)					
143, 033	Riddle, G. T., Saint Louis, Mo. Sawing-machine	Sept. 23, 1873	634	216	4	326
5, 340	Rider, A. K., New York, N. Y. Hot-air engine.....	Mar. 25, 1873	851	279	3	343
141, 382	Rider, A. K., assignor to G. C. Wooster, J. Gowdy, and A. K. Rider, Walden, N. Y. Door-hanger	July 29, 1873	980	318	4	123
143, 255	Rider, A. K., New York, N. Y. Piston and packing	Sept. 30, 1873	820	281	4	357
141, 383	Rider, J., Newark, Ohio. Breech-loading fire-arm	July 29, 1873	981	319	4	123
141, 384	Same.....	July 29, 1873	983	319	4	123
141, 590	Same..... Magazine fire-arm	Aug. 5, 1873	153	49	4	147
135, 443	Rider, J. F. C., South New Market, N. H. Machine for making spools	Feb. 4, 1873	46	14, 15	3	131
138, 940	Rider, J. S., Sing Sing, N. Y. Bolt-cutter	May 13, 1873	424	133	3	542
144, 412	Rider, L. P., Pittsburgh, Pa. Car-coupling	Nov. 11, 1873	210	71	4	507
	Rider, T. J. (See Earle & Rider.)					
144, 290	Ridler, G., Rickardsville, Iowa. Churn-dasher	Nov. 4, 1873	99	33	4	486
	Riedel, E., <i>et al.</i> (See Von Culin, M., assignor.)					
141, 954	Rieger, C., Morrisania, N. Y. Extension-table	Aug. 19, 1873	503	166	4	193
	Riehle Brothers. (See Olsen, T., assignor.)					
135, 365	Rife, O. C., assignor of one-half interest to J. M. Burge, North Manchester, Ind. Dust-guard for car-windows	Jan. 28, 1873	816	263	3	113
140, 541	Rife, O. C., North Manchester, Ind. Ventilator and cinder and dust guard for car-windows	July 1, 1873	169	57	4	22
135, 666	Rigby, J., Portsmouth, Ohio. Apparatus for the manufacture of gas from hydrocarbons.	Feb. 11, 1873	264	83	3	160
139, 919	Rigby, S., assignor of two-thirds interest to J. F. Johnson and G. Rhorer, Cincinnati, Ohio. Gas-burner.....	June 17, 1873	452	141	3	668
135, 366	Rigell, M., Newton, Ala. Insect-trap.....	Jan. 28, 1873	816	264	3	113

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 520	Rigg, J., Cleveland, Ohio. Pipe-wrench.....	June 3, 1873	65	22	3	614
138, 936	Riggins, G. B., New York, N. Y. Steam-heater.....	May 13, 1873	421	132	3	542
	Riggs, J. W., Brooklyn, N. Y. Truss-spring..... (Extension)	Jan. 18, 1873			3	37
136, 387	Same..... same.....	Mar. 4, 1873	31	12	3	248
139, 191	Riggsbee, J., Chapel Hill, N. C. Washing-machine.....	May 20, 1873	666	208	3	575
6, 361	Righter, C., assignor to J. Gay, Philadelphia, Pa. Carpet..... (Design)	Jan. 21, 1873			3	71
6, 578	Righter, C. A., assignor to Dornan, Maybin & Co., Philadelphia, Pa. Carpet..... (Design)	Apr. 8, 1873			3	387
6, 579	Same..... same..... (Design)	Apr. 8, 1873			3	387
6, 655	Same..... same..... (Design)	May 20, 1873			3	559
6, 819	Same..... same..... (Design)	Aug. 19, 1873			4	185
6, 820	Same..... same..... (Design)	Aug. 19, 1873			4	185
6, 821	Same..... same..... (Design)	Aug. 19, 1873			4	185
6, 822	Same..... same..... (Design)	Aug. 19, 1873			4	185
6, 823	Same..... same..... (Design)	Aug. 19, 1873			4	185
6, 984	Same..... same..... (Design)	Nov. 4, 1873			4	478
140, 076	Rightor, W. R., Helena, Ark. Elevator.....	June 17, 1873	583	185	3	679
142, 732	Same..... Apparatus for relieving grounded vessels.....	Sept. 9, 1873	365	123	4	283
	Rigney, J. (See Kealy & Rigney.)					
143, 718	Riker, S. L., New York, N. Y. Hand-tool for the manufacture of heels.....	Oct. 14, 1873	302	99	4	413
	Riley & Maitland. (See Berndt, B., assignor.)					
143, 301	Riley, E., Pontnewynydd, England. Puddling-furnace.....	Sept. 30, 1873	859	294	4	361
137, 240	Riley, J. B., Muncy, Pa. Feather-renovator.....	Mar. 25, 1873	809	266	3	339
137, 723	Riley, W., Madison County, Miss. Wood fence.....	Apr. 8, 1873	407	125	3	401
	Rinehart, W. D. (See Jackson, R. A., assignor.)					
140, 792	Ring, J., Saint Louis, Mo. Apparatus for cooling storage-rooms.....	July 15, 1873	402	137	4	60
140, 843	Ring, J. L., Mount Pulaski, Ill. Heating-stove.....	July 15, 1873	445	151	4	64
139, 479	Ring, W., Owen County, Ind. Device for leveling millstones.....	June 3, 1873	32	10	3	611
142, 121	Ringstad, I. G., Decorah, Iowa. Machine for sawing wood.....	Aug. 26, 1873	672	221	4	216
140, 542	Ringwalt, J. L., Philadelphia, Pa. Typographical printing-plate.....	July 1, 1873	170	57	4	22
5, 666	Ripley, D. C., Pittsburgh, Pa. Salt and pepper dredge..... (Reissue)	Nov. 18, 1873	569	193	4	548
139, 081	Same..... Jelly-glass.....	May 20, 1873	562	176	3	566
140, 793	Same..... Molasses-pitcher.....	July 15, 1873	403	137	4	60
142, 351	Same..... Salt and pepper dredge.....	Sept. 2, 1873	26	10	4	244
135, 367	Risdon, T. H., and W. W. Tyler, Mount Holly, N. J. Turbine water-wheel.....	Jan. 28, 1873	817	264	3	113
142, 277	Risley, M., Springfield, Mass. Eye-glass.....	Aug. 26, 1873	800	264	4	227
139, 330	Rissinger, D., Mahanoy City, Pa. Cross-paddle propeller-fan for ventilating mines.....	May 27, 1873	797	254	3	593
	Richey, D., et al. (See Salyer, W. H., assignor.)					
	Ritchie, F. (See Vedder & Ritchie)..... (Design)					
	Same..... (See Vedder, Ritchie & Heister)..... (Design)					
143, 847	Ritchie, F. J., Edinburgh, Scotland. Electric clock.....	Oct. 21, 1873	432	144	4	434
135, 730	Ritchie, P. C., New York, N. Y. Machine for stiffening netting for bonnet-frames, &c.....	Feb. 11, 1873	318	101	3	165
136, 548	Riter, J. L., Brownsville, Ind. School-furniture.....	Mar. 4, 1873	178	57	3	259
139, 082	Rittenhouse, G. E., Akron, Ohio. Door-check.....	May 20, 1873	563	176	3	
136, 182	Rittenhouse, S. B., Larwill, Ind. Lath-machine.....	Feb. 25, 1873	740	238	3	
141, 172	Ritty, S., Dayton, Ohio. Steam-boiler.....	July 22, 1873	766	252	4	
140, 308	Rivers, T. L., Newark, N. J. Trunk-lock.....	June 24, 1873	801	254	3	705
	Riviere, A. (See Andrews & Riviere.)					
144, 477	Riviere, A., Barnesville, Ga. Plow.....	Nov. 11, 1873	263	89	4	511
142, 278	Roache, J. E., New York, N. Y. Clothes-line support.....	Aug. 26, 1873	800	264	4	227
136, 868	Roat, E., Buffalo, N. Y. Lubricating compound.....	Mar. 18, 1873	468		3	301
140, 543	Robb, W. D., New Philadelphia, Ohio. Fire-place.....	July 1, 1873	171	58	4	22
137, 961	Robbins, C., assignor to self and J. A. Robbins, Charlestown, Mass. Baker's oven.....	Apr. 15, 1873	617	{ 194 195 }	{ 3 3 }	432
144, 357	Robbins, E. Y., Cincinnati, Ohio. Device for retaining fire in stoves.....	Nov. 4, 1873	155	51	4	491
	Robbins, H. R., Baltimore, Md. Fire-place heating-stove..... (Extension)	Mar. 29, 1873				
143, 256	Robbins, H. T., Hyde Park, Mass. Drawing-roll.....	Sept. 30, 1873	821	281	4	357
	Robbins, J. A. (See Robbins, C., assignor.)					
	Robbins, J. W. (See Russell, R. L., assignor.)					
5, 676	Robbins, R. B., Adrian, Mich. Cultivator..... (Reissue)	Dec. 2, 1873	211	72	4	602
135, 010	Same..... Draft-tube for soda-fountains.....	Jan. 21, 1873	484	155	3	74
141, 462	Same..... Cultivator.....	Aug. 5, 1873	47	15	4	139
142, 513	Same..... Draft-tube for soda-fountains.....	Sept. 2, 1873	171	56	4	255
136, 005	Robbins, S. M., New York, N. Y. Hat and coat guard.....	Feb. 18, 1873	569	188	3	198
138, 045	Roberts, A. E., Des Moines, Iowa. School-desk and seat.....	Apr. 22, 1873	714	225	3	449
143, 997	Roberts, A. F., Knoxville, Tenn. Combined cotton-chopper and cultivator.....	Oct. 28, 1873	582	193	4	456
136, 183	Roberts, C., Winchester, Ill. Latch for gates and other purposes.....	Feb. 25, 1873	741	239	3	223
5, 689	Roberts, C. C., Perrysburgh, Ohio. Gage for sewing-machines..... (Reissue)	Dec. 16, 1873	615	201	4	659
136, 006	Roberts, C. H., Troy, N. Y. Gas-lighting torch.....	Feb. 18, 1873	570	188	3	198
5, 434	Roberts, E. A. L., Titusville, Pa. Method of and means for increasing the capacity of oil-wells..... (Reissue)	June 3, 1873	181	59	3	623
139, 192	Same..... Treating explosive compounds to render them safe for blasting and other purposes.....	May 20, 1873	667		3	575
135, 158	Roberts, E. W., assignor of one-third interest to T. S. Wotkyns, Troy, N. Y. Slate.....	Jan. 21, 1873	605	197	3	84
138, 695	Roberts, G. J., Dayton, Ohio. Steam-pump.....	May 6, 1873	201	63, 64	3	514
145, 900	Roberts, G. L., Boston, Mass. Pegging-machine.....	Dec. 23, 1873	781	{ 255 256 }	{ 4 4 }	684
145, 968	Roberts, H. A., Boston, Mass. Refrigerator for slaughter-houses.....	Dec. 30, 1873	864	280	4	702
134, 932	Roberts, I., assignor of one-half interest to J. T. Brearley, Meriden, Ill. Vise.....	Jan. 14, 1873	401	128	3	52
	Roberts, J. M. (See Schmeltzer & Roberts.)					
140, 077	Roberts, M. R., San Francisco, Cal. Coal-screen and chute.....	June 17, 1873	584	185	3	679
140, 544	Roberts, N. C., Waterville, N. Y. Water-wheel.....	July 1, 1873	171	58	4	22
135, 491	Roberts, R., Dubuque, Iowa. Wagon-brake.....	Feb. 4, 1873	89	28	3	134
136, 940	Roberts, R. A., Salisbury, Mo. Harvester.....	Mar. 18, 1873	530	175	3	306
145, 364	Roberts, W., jr., Copper Falls, Mich. Rock-drill.....	Dec. 9, 1873	293	98	4	621
	Roberts, W. A., et al. (See Lowrie, H. C., assignor.)					
	Roberts, W. C. (See Stout, P. F., assignor.)					
143, 095	Roberts, W. J., Cold Spring, N. Y. Snow-plow.....	Sept. 23, 1873	684	235	4	330
135, 046	Robertson, A. S., assignor of one-third interest to J. M. Beals, Boston, Mass. Molding-plane.....	Jan. 21, 1873	517	167	3	77
140, 166	Robertson, J., Lasswade, Great Britain, assignor by mesne assignment to L. Ashmun & Co., Paterson, N. J. Apparatus for repairing knotter, strainer, or screen-plates of paper-machines.....	June 24, 1873	682	214	3	695
141, 236	Robertson, J., assignor to self and L. W. Langdon, Northampton, Mass. Sewing-machine caster.....	July 29, 1873	840	274	4	112
	Robertson, J. F. (See Holly & Robertson.)					

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6, 580	Robertson, J. R., Syracuse, N. Y. Plant-stand..... (Design)	Apr. 8, 1873			3	387
139, 974	Robertson, S. F., Rockford, Ill. End-gate for wagons.....	June 17, 1873	492	155	3	671
144, 142	Robertson, T. I., Madison, N. C. Box-clamp for tobacco-presses.....	Oct. 28, 1873	702	233	4	466
141, 014	Robichau, M. C., Marblehead, Mass. Carpenter's gage.....	July 22, 1873	623	210	4	87
139, 263	Robins, W. B., Shepard's Bush, England, assignor to E. & H. Haynes, Edgeware Road, England. Hand-pump or syringe.....	May 27, 1873	742	535	3	588
	Robinson, A. (See Stewart, W. H., assignor.)					
137, 241	Robinson, C., Eau Claire, Wis. Hame for harness.....	Mar. 25, 1873	810	266	3	339
140, 592	Robinson, C., Boston, Mass. Clothes-wringer.....	July 8, 1873	229	77	4	38
	Robinson, F., et al. (See Parmelee, D. D., assignor.)					
144, 228	Robinson, G., Chillicothe, Mo. Portable fence.....	Nov. 4, 1873	53	16	4	482
145, 451	Robinson, G., Louisville, Ky. Tobacco-package.....	Dec. 9, 1873	366	122	4	627
135, 590	Robinson, G. C., Cincinnati, Ohio. Spoon, fork, &c.....	Feb. 4, 1873	188	58	3	142
	Robinson, G. H., et al. (See Ericsson, J., assignor.)					
	Robinson, H. (See Lascell, G. W., assignor.)..... (Reissue.)					
145, 592	Robinson, H. B., Birmingham, Ala. Churn-dasher.....	Dec. 16, 1873	504	166	4	650
	Robinson, I. J. (See Fairbanks & Robinson.)					
	Robinson, J. (See Somerville & Robinson.)					
140, 646	Robinson, J., Madison Station, Miss. Invalid-bedstead.....	July 8, 1873	275	93	4	42
145, 527	Robinson, J. A., Fremont, N. H. Way-meter for wheel vehicles.....	Dec. 16, 1873	452	148	4	646
	Robinson, J. D. (See Churchill & Robinson.)					
	Robinson, J. E., et al. (See Knowlton, C. H., assignor.)					
	Robinson, J. L., et al. (See Glenn, G. K., assignor.)					
	Robinson, L. (See Sperry & Robinson.)..... (Reissue.)					
144, 413	Robinson, L., Newton, Mass. Window-ventilator.....	Nov. 11, 1873	211	71	4	507
	Robinson, M., et al. (See Glenn, G. K., assignor.)					
135, 444	Robinson, M., deceased, by S. Robinson, administratrix, Accrington, England. Machine for shaping the elastic dents of combs for looms.....	Feb. 4, 1873	48	15, 16	3	131
145, 452	Robinson, M. P., Fayette County, Ky. Combined lounge and chair.....	Dec. 9, 1873	366	122	4	627
	Robinson, S., administratrix. (See Robinson, M.)					
5, 285	Robinson, S. W., Champaign, Ill., and De Wood, Ann Arbor, Mich. Machine for drilling rock..... (Reissue.)	Feb. 18, 1873	679	220	3	206
136, 764	Robinson, T. C., and C. W. Clift, Mystic Bridge, Conn. Engine.....	Mar. 11, 1873	371	123	3	284
142, 279	Roby, J. B., Cambridge, assignor to G. R. Taber, Boston, Mass. Corset-clasp.....	Aug. 26, 1873	801	265	4	227
140, 794	Roche, J. A., and G. V. Orton, Chicago, Ill. Wheel or pulley for band-saws.....	July 15, 1873	404	137	4	60
144, 797	Roche, J. A., and G. V. Orton, said Orton assignor to said Roche, Chicago, Ill. Band sawing-machine.....	Nov. 18, 1873	542	184	4	545
134, 562	Rock, A., New Orleans, La. Process of preparing moss for mattress-stuffing, &c.....	Jan. 7, 1873	57		3	11
135, 667	Rock, A. D., Hamilton, Nev. Railway-track.....	Feb. 11, 1873	266	84	3	160
144, 143	Rockwell, B. B., Waterford Mills, Ind. Horse hay-fork.....	Oct. 28, 1873	703	233	4	466
143, 302	Rockwell, J. G., assignor to self and P. C. Wette, Shell Rock, Iowa. Railway-switch.....	Sept. 30, 1873	860	294	4	361
139, 423	Rockwell, J. V., New York, N. Y. Ruche-holder.....	May 27, 1873	885	285	3	600
139, 920	Rockwell, L. A., assignor to self and J. A. Currier, Tremont, N. Y. Cracker-machine.....	June 17, 1873	453	{ 141 } 142	{ 3 } 3	668
139, 975	Rockwood, L. O., Ottawa, Ill. Cider-mill.....	June 17, 1873	492	156	3	672
135, 246	Rodden, W. H., Toronto, Canada. Metallic shutter.....	Jan. 28, 1873	712	227	3	105
145, 901	Roden, A., Mumfords, Ala. Cultivator.....	Dec. 23, 1873	783	256	4	685
143, 533	Rodes, T., Pulaski, Tenn. Railway-rail joint.....	Oct. 7, 1873	117	40	4	390
	Rodgers, A. (See Hinkley & Rodgers.)					
	Rodgers, A. (See Tarrant, E., assignor.)..... (Reissue.)					
139, 264	Rodgers, A., Muskegon, Mich. Saw-mill head-block.....	May 27, 1873	743	{ 235 } 236	{ 3 } 3	588
140, 647	Same..... Machine for sawing laths.....	July 8, 1873	276	93	4	42
142, 280	Same..... Log-canting machine.....	Aug. 26, 1873	801	265	4	227
142, 816	Same..... Crank for saw-mills.....	Sept. 16, 1873	445	150	4	300
141, 385	Rodgers, A. C., assignor to self and J. A. Hamilton, Suffield, Conn. Sash-fastener.....	July 29, 1873	984	319	4	123
	Rodgers, H., et al. (See Brigham, C. H., assignor.)					
144, 144	Rodgers, T. P., Taunton, Mass. Belt-hole cover.....	Oct. 28, 1873	703	233	4	466
138, 439	Rodier, L. C., and F. G. Bates, Springfield, Mass. Magazine fire-arm.....	Apr. 29, 1873	1, 087	343	3	487
138, 440	Rodier, L. C., and F. G. Bates, Springfield, Mass., assignors to selves, R. Baker, Middletown, Conn., and W. Parker, New York, N. Y. Car-starter.....	Apr. 29, 1873	1, 088	344	3	487
144, 700	Rodier, L. C., and F. G. Bates, Springfield, Mass. Stop-cock.....	Nov. 18, 1873	461	156	4	539
	Rodney Hunt Machine Company. (See Flint, D. B., assignor.)					
	Roebbing, J. E., et al. (See Von Culin, M., assignor.)					
145, 014	Roedel, H. H., Lebanon, Pa. Brace-truss.....	Nov. 25, 1873	734	248	4	572
	Roehl, C. (See Luehmann & Roehl.)					
	Roescher, R. (See Petersen & Roescher.)					
137, 321	Rogan, D. H., assignor of one-half interest to A. Lufkin, Newtown, Iowa. Sewing-machine.....	Apr. 1, 1873	38	12	3	360
	Rogers, A. E., trustee. (See Cooper, J. W., assignor.)					
137, 029	Rogers, A. E., La Grande, Oreg. Candlestick.....	Mar. 18, 1873	608	201	3	312
140, 309	Rogers, C., Allegheny, assignor to self and J. A. Hutchison, Pittsburgh, Pa. Steam-engine valve-gear.....	June 24, 1873	802	254	3	705
	Rogers, C. & Bros. (See Bunnell, G. W., assignor.)..... (Design.)					
	Rogers, C. & Bro. (See Rogers, C. B., assignor.)..... (Design.)					
	Same..... (See Rogers, H., jr., assignor.)					
6, 639	Rogers, C. B., assignor to C. Rogers & Bro., Meriden, Conn. Casket-handle socket..... (Design)	May 6, 1873			3	497
6, 640	Rogers, C. B., assignor to C. Rogers & Bro. Casket-handle socket..... (Design)	May 6, 1873			3	497
	Rogers, C. M. A. (See Rogers, E. H., assignor.)					
136, 621	Rogers, E., Cleveland, Ohio. Machine for tapping pipe-fittings.....	Mar. 11, 1873	253	85, 86	3	275
143, 188	Same..... Machine for molding and pressing bricks by hydraulic pressure.....	Sept. 23, 1873	754	{ 260 } 261	{ 4 } 4	336
144, 701	Rogers, E., Rochester, Ind. Hand corn-planter.....	Nov. 18, 1873	462	156	4	539
135, 011	Rogers, E. F., Chelsea, assignor to self, L. L. & S. B. Holden, Woburn, Mass. Apparatus for burning hydrocarbons.....	Jan. 21, 1873	484	155	3	74
136, 765	Rogers, E. H., Tuscaloosa, Ala., assignor to self and C. M. A. Rogers, Gainesville, Ala. Process of obtaining gum resembling India-rubber.....	Mar. 11, 1873	372		3	284
	Rogers, G. W. (See Mason & Rogers.)					
	Rogers, H. (See Moore and Hurlbut, assignors.)					
	Same..... (See Moore, S., assignor.)					
135, 591	Rogers, H., Sudbury, and L. Felton, Marlborough, assignors to selves and S. Moore, Sudbury, Mass. Boot and shoe.....		188	58	3	142
138, 696	Rogers, H., jr., assignor to C. Rogers & Bro., West Meriden, Conn. Coffin-handle.....	May 6, 1873	203	64	3	514
139, 690	Rogers, H. D., Cincinnati, Ohio. Printing and dial telegraph and circuit therefor.....	June 10, 1873	230	74	3	644

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134, 933	Rogers, I. R., assignor to self, J. Wooldredge, G. E. Bartlett, Lynn, Mass. Heel-stiffener.	Jan. 14, 1873	402	128	3	52
136, 096	Same.....Sole-edge trimming-tool.	Feb. 18, 1873	648	212	3	204
6, 548	Rogers, J., New York, N. Y. Group of statuary.....(Design)	Apr. 1, 1873			3	357
6, 960	Same.....Statue.....(Design)	Oct. 14, 1873			4	401
7, 016	Same.....Group of statuary.....(Design)	Dec. 2, 1873			4	585
139, 265	Rogers, J. G., assignor to self and S. S. White, Niles, Mich. Floor-clamp.	May 27, 1873	745	236	3	589
140, 388	Rogers, J. G., Berrien County, assignor of one-half interest to S. S. White, Michigan City, Mich. Pruning-shears.	July 1, 1873	45	15	4	12
143, 465	Rogers, J. G., assignor to V. Stockton, Williamsburgh, Ohio. Fire-heating furnace.	Oct. 7, 1873	57	20	4	385
140, 167	Rogers, J. H., and J. W., Peekskill, N. Y. Wire-way	June 24, 1873	684	214	3	695
	Rogers, J. W. (See Rogers, J. H., and J. W.)					
	Rogers, L. J. (See Rogers, W., assignor).....(Design)					
140, 545	Rogers, S., assignor of one-half interest to J. Coatsworth, London, England. Car-coupling	July 1, 1873	173	59	4	22
142, 281	Rogers, S., and A. J. Mason, Butler, Ind. Bee-hive	Aug. 26, 1873	803	265	4	227
145, 902	Rogers, T., assignor to W. L. Walker and B. G. Devoe, Kenton, Ohio. Iron fence.	Dec. 23, 1873	784	256	4	685
145, 903	Rogers, T., and B. G. Devoe, Kenton, Ohio, said Devoe assignor to T. Rogers and W. L. Walker. Iron fence.	Dec. 23, 1873	785	257	4	685
6, 585	Rogers, W., assignor to L. J. Rogers, Hartford, Conn. Knife, fork, and spoon-handle. (Design)	Apr. 8, 1873			3	387
135, 445	Roggenburger, M. and S., Philadelphia, Pa. Setting and sewing ruches.	Feb. 4, 1873	50	16, 17	3	131
	Roggenburger, S. (See Roggenburger, M. and S.)					
139, 617	Röhmer, A., Newport, Ky. Corn-planter	June 3, 1873	150	50	3	621
143, 719	Rohr, G., Williamsburgh, N. Y. Heel-plate for boots and shoes	Oct. 14, 1873	303	99	4	413
134, 612	Rohrbaker, G., Penn Station, Pa. Door-check	Jan. 7, 1873	105	34	3	15
135, 159	Rohrer, G. B., Oxford, Ohio. Refrigerator for preserving butter, &c.	Jan. 21, 1873	605	197	3	84
143, 591	Rohrer, J., Lancaster, Pa. Refrigerator	Oct. 14, 1873	179	61	4	404
6, 492	Rohrer, J. B., assignor to S. Cooper and J. Hall, Philadelphia, Pa. Lounge.....(Design)	Mar. 11, 1873			3	272
6, 507	Same.....same.....(Design)	Mar. 18, 1873			3	297
144, 291	Rohrer, J. C., Gomer, Ohio. Farm gate	Nov. 4, 1873	99	33	4	486
	Rohrmayer, G. (See Jackson, J., assignor.)					
140, 593	Roland, I. S., Reading, Pa. Water-wheel	July 8, 1873	230	77	4	38
136, 097	Roll, J. J., Newark, N. J. Bed or cradle guard	Feb. 18, 1873	649	212	3	204
137, 030	Roller, T., Allegheny City, Pa. Mattress	Mar. 18, 1873	608	201	3	312
	Rollins, G. D. (See Harrington & Rollins.)					
141, 591	Romadka, A. V., assignor to Romadka Brothers, Milwaukee, Wis. Trunk-lid support.	Aug. 5, 1873	154	50	4	148
145, 817	Same.....Lock or catch for trunks	Dec. 23, 1873	706	232	4	679
	Romadka Brothers. (See Romadka, A. V., assignor.)					
137, 962	Rommel, C., Elizabeth, N. J., assignor to self and W. H. Townsend, New York, N. Y. Oil-cloth printing-machine	Apr. 15, 1873	618	195	3	432
141, 669	Rood, D., Mount Erie, Ill., assignor of one-half interest to F. Emley, Franklin, Ohio. Wagon-bed lifter		244	77	4	163
138, 197	Roop, J., Clinton, Tenn. Plow	Apr. 22, 1873	846	268	3	459
144, 565	Roos, A., New York, N. Y. Racking cock	Nov. 11, 1873	339	115	4	517
	Roose, C., trustee. (See Cooper, J. W., assignor.)					
145, 127	Root, E. S., Providence, R. I. Refrigerator	Dec. 2, 1873	83	27	4	592
5, 524	Root, J. B., New York, N. Y., assignor by mesne assignment of one-third interest to T. C. M. Paton. Steam-generator.....(Reissue)	Aug. 5, 1873	191	60	4	151
5, 525	Root, J. B., New York, N. Y., assignor by mesne assignment to A. S. Hill, H. H. Noyes, and H. M. Haskell, Pleasantville, Pa. Pump for oil-wells.....(Reissue)	Aug. 5, 1873	193	61	4	151
141, 592	Root, J. B., New York, N. Y. Feed-water regulator	Aug. 5, 1873	155	50	4	148
141, 593	Same.....Machine for chucking and revolving tubes, &c	Aug. 5, 1873	156	50	4	148
141, 594	Same.....Boiler-furnace	Aug. 5, 1873	157	50	4	148
144, 358	Same.....Vacuum-pan for the manufacture of sugar, &c	Nov. 4, 1873	136	51	4	491
146, 096	Same.....Baling-press	Dec. 30, 1873	976	315	4	711
146, 097	Same.....Sectional steam-boiler connection	Dec. 30, 1873	976	315	4	711
144, 566	Root, M. C., Janesville, Wis. Hand corn-planter	Nov. 11, 1873	340	115	4	517
	Root, S. E., Bristol, Conn. Clock-dial.....(Extension)	May 10, 1873			3	497
145, 071	Ropes, D. N., Orange, N. J., assignor to India-Rubber Comb Company. College Point, N. Y. Band-comb	Dec. 2, 1873	28	9	4	588
	Ropes, E. H. (See Groves, J. R., assignor.)					
136, 766	Ropp, J. W., and R. C. Kibby, Elyria, Ohio. Buckle for harness	Mar. 11, 1873	373	123	3	284
	Rorer, C. (See Stout, C., assignor.)					
146, 098	Rorke, H. B., Cazenovia, N. Y. Sharpening-machine	Dec. 30, 1873	977	316	4	711
142, 045	Rosamyer, H., jr., Rochester, Pa. Centrifugal clothes-wringer	Aug. 19, 1873	589	193	4	200
138, 937	Rose, C. L., Roseville, Ill. Washing-machine	May 13, 1873	422	132	3	542
136, 869	Rose, F., Boston, Mass. Drawer	Mar. 18, 1873	469	155	3	301
138, 763	Rose, H. M., Waterman Station, Ill. Wire-fence	May 13, 1873	275	85	3	530
136, 098	Rose, I. M., Brookhaven, N. Y. Embroidering-attachment for sewing-machines	Feb. 18, 1873	649	213	3	204
134, 563	Rose, P. H., Canandaigua, N. Y. Metallic stove-board and floor-protector	Jan. 7, 1873	58	17	3	11
137, 624	Rose, W. E., Hornellsville, N. Y. Medical compound for liniment	Apr. 8, 1873	314		3	394
141, 463	Rosebrook, L. R., Harmon, Ill. Running-gear of vehicles	Aug. 5, 1873	49	15	4	139
137, 797	Rosenfield, A., assignor to self and H. Polley, San Francisco, Cal. Music-leaf turner	Apr. 15, 1873	482	151	3	420
141, 079	Rosenstein, L., and S. Feeder, Memphis, Tenn. Curling-iron	July 22, 1873	679	228	4	92
141, 237	Rosenstjerna, A., assignor of one-fifth interest to C. Ferm, Chicago, Ill. Letter-box	July 29, 1873	841	274	4	112
141, 015	Rosenthal, C., Philadelphia, Pa. Reel for clothes-lines	July 22, 1873	623	210	4	87
141, 819	Rosevelt, W. H., Rochester, assignor to self, D. J. Sprague, and C. E. Blanchett, Buffalo, N. Y. Compositions for cleaning glass, silverware, &c	Aug. 12, 1873	374		4	173
142, 733	Rosin, H. C., assignor of one-half interest to W. L. Beard, Detroit, Mich. Circular-saw table	Sept. 9, 1873	365	123	4	283
	Ross, A. B. (See Morris, W. H., assignor.)					
144, 927	Ross, A. Q., Cincinnati, Ohio. Burglar-alarm.....(Extension)	Sept. 27, 1873			4	322
136, 388	Ross, A. W., Northfield, Mass. Hand-cultivator	Nov. 25, 1873	661	224	4	566
53, 883	Ross, E. A., Albany, N. Y. Croquet-mallet	Mar. 4, 1873	32	12	3	248
146, 022	Ross, G., Newport, Ky. Molding and casting apparatus.....(Disclaimer filed)	Jan. 9, 1873			3	38
142, 122	Ross, H., Plattsburgh, N. Y. Wash-boiler	Dec. 30, 1873	910	295	4	705
145, 528	Ross, H. S., Chicago, Ill. Cock	Aug. 26, 1873	673	221	4	216
137, 097	Ross, H. S., Millville, Ohio. Fence-post	Dec. 16, 1873	453	148	4	646
143, 422	Ross, J., Greenville, Mich. Low-water alarm and indicator	Mar. 25, 1873	679	226	3	329
	Ross, J., Charlestown, assignor to J. F. Ross, North Cambridge, Mass. Lubricator	Oct. 7, 1873	24	9	4	382
	Ross, J. B., et al. (See Flora, O. V., assignor.)					
	Ross, J. F. (See Ross, J., assignor)					
142, 944	Ross, J. F., Hamilton, Canada. Railway-signal	Sept. 16, 1873	552	187	4	309
140, 078	Ross, J. G., Philadelphia, Pa., assignor to J. W. French, V. K. Spear, B. Dore, and W. F. Morgan, Lynn, Mass. Form-plate for bottoms of shoe-lasts	June 17, 1873	585	185	3	679

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page
143, 786	Ross, J. G., assignor of one-half interest to T. P. and S. S. Smith, Philadelphia, Pa. Jack for nailing, &c., boots and shoes	Oct. 21, 1873	378	125	4	429
138, 764	Ross, J. G., and T. L. Miller, Philadelphia, Pa., assignors to J. W. French, V. K. Spear, B. Dore, and W. F. Morgan, Lynn, Mass. Shoe-sewing machine	May 13, 1873	276	85, 86	3	530
137, 798	Ross, L. E., Providence, R. I. Loom-picking mechanism	Apr. 15, 1873	483	151	3	420
143, 257	Ross, L. E., assignor of three-fourths interest to E. C. Mowry, Providence, R. I., and J. Enoch and D. B. Allen, West Liberty, Ohio. Loom-picking mechanism	Sept. 30, 1873	822	282	4	358
134, 705	Ross, N., Washington, D. C. Hand printing-press	Jan. 7, 1873	193	63	3	22
142, 585	Ross, N. G., Mitchellville, Iowa. Saw filing and setting machine	Sept. 9, 1873	243	80	4	273
141, 386	Ross, O. C., Penfield, N. Y. Device for preventing horses from crowding	July 29, 1873	985	320	4	123
139, 331	Ross, R., assignor to National Horse-Nail Company, Vergennes, Vt. Machine for finishing horseshoe nails	May 27, 1873	797	254	3	593
139, 332	Same..... Machine for swaging and trimming the points of horseshoe nails	May 27, 1873	798	255	3	593
112, 352	Same..... Machine for finishing horseshoe nails	Sept. 2, 1873	27	10	4	244
	Ross, T. (See Strong & Ross) (Extension.)					
141, 238	Ross, W. H., Brooklyn, N. Y. Composition for burial-caskets	July 29, 1873	843		4	112
	Rossi, G., et al. (See Durini, A., assignor.)					
145, 244	Rossiter, W. T., Lincoln, Nebr. Door-spring	Dec. 2, 1873	183	63	4	600
138, 819	Rossow, C., Chicago, Ill. Sofa-bedstead	May 13, 1873	324	100	3	534
138, 938	Roswag, C., and A. N. De Pauville, Paris, France. Separating gold and silver from lead containing the same	May 13, 1873	423	132	3	542
	Rote, D. J. (See Temple, J., assignor.)					
144, 567	Rote, J. F., Reading, Pa. Egg-beater	Nov. 11, 1873	342	115	4	517
143, 258	Roth, J. J., Philadelphia, Pa. Device for cooling millstones	Sept. 30, 1873	823	282	4	358
	Rothermel, D. N. (See Ellison, J. C., assignor.)					
139, 333	Rotter, C., East Birmingham, Pa. Varnish or bronze coating for articles of plaster, iron, wood, &c.	May 27, 1873	799		3	593
	Rouart, H. S., et al. (See Carré, F. P. E., assignor.) (Reissue.)					
	Rouart, S. H. (See Gauduin, Mignon & Rouart.)					
137, 799	Rounds, W. H., Campello, Mass. Last for boots and shoes	Apr. 15, 1873	484	151	3	421
136, 458	Rountree, G. H., Milwaukee, Wis. Hand-stamp	Mar. 4, 1873	88	30	3	253
134, 934	Rouse, A. M., assignor of one-half interest to C. Amsler, Saint Louis, Mo. Car-brake	Jan. 14, 1873	402	128	3	52
138, 697	Rouse, A. M., assignor of one-half interest to P. E. Bland, Saint Louis, Mo. Water-meter	May 6, 1873	203	64	3	514
140, 731	Rouse, A. M., Saint Louis, Mo. Water-meter	July 8, 1873	343	116	4	48
145, 015	Same..... Railway-rail fastening	Nov. 25, 1873	735	248	4	572
143, 423	Rouse, C. S., Dowagiac, Mich. Fly-trap	Oct. 7, 1873	25	10	4	383
	Rouse, G. L. (See Royer & Rouse.)					
139, 691	Rouse, G. L., Cincinnati, Ohio. Hub for vehicles	June 10, 1873	232	74	3	644
140, 732	Same..... Spoke-polishing machine	July 8, 1873	344	116	4	48
139, 818	Rousseau, D., New York, N. Y. Speaking-tube annunciator	June 10, 1873	354	110	3	653
140, 953	Rousseau, D., assignor to self and W. C. Smith, New York, N. Y. Circuit-closer for railway-signal	July 15, 1873	551	185	4	72
141, 387	Same..... Electric railway-signal	July 29, 1873	985	320	4	123
144, 568	Same..... Circuit-breaker for electric railway-signals	Nov. 11, 1873	343	115	4	517
137, 484	Routledge, T., Sunderland, England. Process of treating fibrous substances for paper-stock	Apr. 1, 1873	185	58	3	372
141, 016	Same..... Mode of treating fibrous substances in the manufacture of paper-stock	July 22, 1873	624	210	4	87
136, 269	Row, J. W., Lewisburgh, Pa. Screw-cutting machine	Feb. 25, 1873	815	263	3	229
	Row, S. B., et al. (See Gearing, C., assignor.)					
	Rowden, G. (See Dickinson, C. W., assignor.)					
	Rowe, A. D. (See Hoskins & Rowe.)					
	Rowe, C. T. (See Rowe, T. & C. T.)					
142, 282	Rowe, J., jr., Wilmington, and F. B. Brown, Boston, Mass. Horseshoe	Aug. 26, 1873	803	266	4	227
144, 145	Rowe, J. L., assignor to self and J. A. Sherman, New York, N. Y. Pad for pile-trusses	Oct. 28, 1873	704	234	4	466
138, 287	Rowe, P. C., Boston, Mass. Water-closet	Apr. 29, 1873	954	300	3	476
145, 688	Rowe, T. and C. T., New York, N. Y. Shutter-worker	Dec. 16, 1873	586	192	4	657
142, 176	Rowe, W., Westerville, Ohio. Device for dressing saw-teeth	Aug. 26, 1873	716	237	4	220
137, 322	Rowland, J. L., Milwaukee, Wis. Manufacture of artificial stone	Apr. 1, 1873	40	13	3	360
137, 323	Same..... Treatment of lime for the manufacture of artificial stone	Apr. 1, 1873	41	13	3	360
137, 485	Rowland, T. F., Green Point, N. Y. Apparatus for charging gas-retorts	Apr. 1, 1873	187	58	3	372
137, 486	Same..... Apparatus for raking gas-retorts	Apr. 1, 1873	189	59	3	372
137, 487	Same..... Gas-retort charger	Apr. 1, 1873	192	59	3	373
143, 998	Rowland, T. F., Brooklyn, N. Y. Gas-retort mouth-piece	Oct. 28, 1873	583	194	4	456
138, 698	Rowland, W. A., Waverly, N. Y. Railway-rail chair	May 6, 1873	204	64	3	514
140, 435	Rowland, W. M., Tyler, Tex. Washing-machine	July 1, 1873	77	27	4	14
136, 767	Rowley, B. L., New Britain, Conn. Bridle-bit	Mar. 11, 1873	374	124	3	284
138, 939	Rowley, J. K., Chicago, Ill. Chair	May 13, 1873	424	133	3	542
	Rowley, S. B. (See Howsers, H., assignor.)					
6, 886	Rowley, S. B., Philadelphia, Pa. Fruit-jar	Sept. 16, 1873			4	296
141, 080	Rowlingson, J. W., Binghamton, N. Y. Scroll-saw	July 22, 1873	680	228	4	92
	Roxbury Carpet Company. (See Goetze, H. F., assignor.) (Design.)					
	Same..... (See Stearne, T. J., assignor.) (Design.)					
145, 072	Roy, D., assignor of one-half interest to S. S. Caughey, Mill-Creek Township, Pa. Machine for bending chain-links	Dec. 2, 1873	29	10	4	588
141, 464	Roy, F., Saint Bernard Parish, La. Sugar-cane coverer	Aug. 5, 1873	49	15	4	139
135, 849	Royal, J., M. A. Lentz, and J. M. Deibert, Lafayette, Ind. Car-coupling	Feb. 11, 1873	427	138	3	172
140, 079	Royall, W. B., Brenham, Tex. Insect-destroying compound	June 17, 1873	586		3	680
	Royer, J. R. (See Royer, T., assignor.)					
137, 031	Royer, T., assignor of one-half interest to J. R. Royer, Lancaster, Pa. Shutter-bowing device	Mar. 18, 1873	609	201	3	313
136, 459	Royer, T., and G. L. Rouse, Cincinnati, Ohio. Hub for vehicles	Mar. 4, 1873	89	31	3	253
	Royer's Ford Iron Foundry. (See Reagan, W. J., assignor.)					
	Roys, A. (See Wright & Roys.)					
139, 480	Roys, F., East Berlin, Conn. Machine for corrugating sheet-metal	June 3, 1873	33	11	3	611
138, 584	Royse, C. W., Rindge, N. H. Machine for cutting box-stuff	May 6, 1873	104	33	3	506
140, 954	Rubarth, L., Davilla, assignor of one-half interest to J. J. Pike, Milam County, Texas. Ant-trap	July 15, 1873	552	185	4	72
	Rudigier, I. (See Wolters & Rudigier.)					
	Rudow, C., et al. (See Kersting, F., assignor.)					
137, 098	Rue, G. W., Hamilton, Ohio. Hand-cultivator	Mar. 25, 1873	679	226	3	329
145, 969	Rue, S., Philadelphia, Pa. Injector	Dec. 30, 1873	866	281	4	702
138, 198	Rue, S., jr., Philadelphia, Pa. Injector for steam-generators	Apr. 22, 1873	846	268	3	459
138, 199	Same..... same	Apr. 22, 1873	847	268	3	459
135, 492	Ruediger, T., Carver County, Minn. Belt-fastening	Feb. 4, 1873	90	28	3	134
144, 034	Ruel, L., assignor to self and J. Demers, Saint Johnsbury, Vt. Car-coupling	Oct. 28, 1873	613	203	4	458

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 414	Ruel, L., assignor to self and J. Demers, Saint Johnsbury, Vt. Apparatus for heating and illuminating	Nov. 11, 1873	212	71	4	507
	Rugg, H. W. (See Winchell & Rugg.)					
143, 466	Ruggles, C., Huron, Ohio. Machine for cutting gores in staves	Oct. 7, 1873	58	20	4	385
144, 635	Same..... Machinery for making barrels	Nov. 18, 1873	406	136	4	534
143, 189	Rughlman, R., Trenton, N. J. Combined shutter-fastener and bower	Sept. 23, 1873	757	261	4	336
142, 869	Ruggles, S. P., Boston, Mass. Steam-engine governor	Sept. 16, 1873	488	167	4	304
144, 478	Ruiseco, J. D., Paris, France. Cigarette-machine	Nov. 11, 1873	264	89, 90	4	511
145, 016	Rumberger, L. C., Cass, Pa. Harrow	Nov. 25, 1873	736	248	4	572
141, 465	Rummer, H. S., Binghamton, N. Y. Vent-ginlet	Aug. 5, 1873	51	16	4	139
145, 593	Rundlett, G. B., assignor to Swamscot Machine Company, South New Market, N. H. Machine for planing the edges of sheet-metal	Dec. 16, 1873	505	166	4	650
143, 642	Rungvist, C. R., Stockholm, Sweden. Governor for steam-engine	Oct. 14, 1873	224	75	4	407
142, 514	Runyan, J. S., Columbus, Ohio. Fire-place grate	Sept. 2, 1873	172	56	4	255
	Runyon, A. L. (See Weber, T. A., assignor.)					
	Runyon, C., et al. (See Parmelee, D. D., assignor.)					
137, 242	Ruof, B., Zoar, Ohio. Water-wheel	Mar. 25, 1873	811	267	3	339
5, 631	Rupertus, J., Philadelphia, Pa. Revolving fire arm (Reissue)	Oct. 28, 1873	740	247	4	469
143, 424	Rush, A., Chariton, assignor of one-half interest to Johnston Ruffler Company, Ottumwa, Iowa. Ruffling or plaiting attachment for sewing-machines	Oct. 7, 1873	26	10	4	383
139, 737	Rushton, T. H., and R. Tonge, Bolton, England. Spinning-mule	June 10, 1873	282	87, 88	3	647
140, 218	Rushton, T. H., and W. Dobson, Bolton, England. Cotton-gin knife-roller	June 24, 1873	725	228	3	699
136, 270	Rushworth, J., New York, N. Y. Windlass for hoisting-machines	Feb. 25, 1873	816	263	3	229
135, 940	Russel, W. H., Sedalia, Mo. Soda-fountain	Feb. 18, 1873	515	168	3	193
136, 099	Russell, A., Brooklyn, N. Y., assignor to A. Russell, Wilton, Me., and C. W. Alexander, Washington, D. C. Folding rocking-chair	Feb. 18, 1873	651	213	3	204
	Russell and Erwin Manufacturing Company. (See Gorman, W., assignor) ... (Design.)					
	Same..... (See Parker, E., assignor.)					
	Same..... (See Webb, R. L., assignor.)					
	Russell, C. P., et al. (See Grant, J. J., assignor.)					
138, 200	Russell, E., Brooklyn, N. Y. Steam-heater	Apr. 22, 1873	848	268	3	459
142, 123	Russell, E. G., Ravenna, Ohio. Pump	Aug. 26, 1873	674	221	4	216
142, 653	Russell, E. P., Maulius, N. Y. Chain-propeller	Sept. 9, 1873	298	98	4	278
144, 479	Russell, H. G., Lincoln, Ill. Car-coupling	Nov. 11, 1873	267	90	4	511
	Russell, H. R. (See Russell, I. S., assignor.)					
	Same..... (See Russell, I. S. and H. R.)					
	Same..... same (Extension.)					
	Russell, I. S., New Market, Md., and H. R. Russell, Woodbury, New Jersey. Harvester	Mar. 29, 1873	.....	.....	3	527
137, 099	Same..... Earth-closet	Mar. 25, 1873	680	226	3	329
138, 346	Same..... Magnesium-lamp	Apr. 29, 1873	1, 005	316	3	480
145, 756	Same..... Earth-closet	Dec. 23, 1873	658	215	4	675
146, 023	Russell, I. S., New Market, Md., assignor of one-half interest to H. R. Russell, Woodbury, N. J. Wood-screw	Dec. 30, 1873	911	295	4	705
	Russell, J. (See Dominy, G., assignor.)					
	Same..... (See Travis, assignor.)					
136, 184	Russell, J., Springfield, Mass. Adjustable nut	Feb. 25, 1873	741	239	3	223
144, 229	Russell, J., Providence, R. I., assignor by mesne assignment to self and W. Sprague. Cut-nail machine	Nov. 4, 1873	54	16	4	482
135, 368	Russell, L., Otsego, Mich. Fastening for sash-ropes	Jan. 28, 1873	817	264	3	113
	Russell, L. B., et al. (See Samuels, J., assignor.)					
137, 724	Russell, M., Union Bridge, Md. Corset	Apr. 8, 1873	408	125	3	402
	Russell, N. W. (See Budge & Russell.)					
144, 702	Russell, R. L., assignor to J. W. Robbins, Brooklyn, N. Y. Safety-pocket attachment	Nov. 18, 1873	462	157	4	539
139, 819	Russell, S., jr., New York, N. Y. Electro-medical bath-tub	June 10, 1873	356	110	3	653
6, 508	Russell, S. L., Chicago, Ill. Basket (Design)	Mar. 18, 1873	.....	.....	3	297
	Russell, W. D. (See Cantrell, R. B., assignor.)					
143, 096	Rust, J., Vauxhall, England. Compound for sanitary and decorative articles used in building	Sept. 23, 1873	685	.....	4	330
139, 193	Rust, R., Odessa, Del. Cultivator	May 20, 1873	668	209	3	575
141, 292	Ruston, G., Freeport, Ill. Wagon-seat fastener	July 29, 1873	890	292	4	117
134, 564	Ruth, S., Philadelphia, Pa. Sun-shade for horses	Jan. 7, 1873	58	18	3	11
137, 488	Ruth, W. A., assignor to J. T. Jakes, W. Broadway, and W. A. Ruth, Wyoming, Del. Medical compound for kidney diseases	Apr. 1, 1873	193	.....	3	373
6, 890	Ruthven, E. C., Philadelphia, Pa., assignor to D. W. Bruce, New York, N. Y. Printing-type	Sept. 23, 1873	.....	.....	4	322
	Same..... Printing-type (Design)	Oct. 7, 1873	.....	.....	4	380
6, 954	Same..... Printing-type (Design)	Aug. 26, 1873	804	266	4	227
142, 283	Rutledge, W. H., Hamilton, Ohio. Furrowing-machine					
	Rutter, J., et al. (See Hays, J. R., assignor.)					
146, 099	Rutter, W. F., Philadelphia, Pa. Water-cooler	Dec. 30, 1873	978	316	4	711
	Ryan, B. (See Nolan K., assignor.)					
145, 529	Ryan, D., Boston, Mass. Attaching slates to roofs	Dec. 16, 1873	454	149	4	646
139, 481	Ryan, D. E., Cincinnati, Ohio. Gas-burner	June 3, 1873	34	11	3	611
141, 239	Ryan, J., Saint Louis, Mo. Steam-generator	July 29, 1873	843	275	4	112
145, 530	Same..... same	Dec. 16, 1873	455	149	4	646
134, 819	Ryan, J. A., Cleveland, Ohio. Indicating-filler for lamps, &c.	Jan. 14, 1873	305	97	3	44
144, 703	Ryan, J. D., New York. Pantaloon-stretcher	Nov. 18, 1873	463	157	4	539
135, 592	Ryan, P., Albany, N. Y. Combined torch and fire-lighter	Feb. 4, 1873	189	59	3	142
	Ryan, T. D. (See Ryan, T. W. & T. D.)					
143, 932	Ryan, T. W. & T. D., Maumee City, Ohio. Car-coupling	Oct. 21, 1873	499	168	4	439
144, 415	Ryder, C., assignor to self and H. G. White, Cambridgeport, Mass. Garden-hose rest	Nov. 11, 1873	213	71	4	507
136, 673	Ryder, H., Somerville, Mass. Grate for furnaces	Mar. 11, 1873	297	99	3	278
138, 441	Same..... Paraffine-lamp	Apr. 29, 1873	1, 089	344	3	487
142, 515	Same..... Apparatus for distilling heavy oils	Sept. 2, 1873	173	56	4	255
139, 024	Ryer, G. H., New York, N. Y. Clothes-line pulley	May 20, 1873	507	160	3	562
135, 593	Rykert, A. G., Attica, N. Y. Carriage-painter's jack	Feb. 4, 1873	189	59	3	142
144, 146	Rynerson, J. H., Clayton, Ind. Corn-ground marker	Oct. 28, 1873	704	234	4	466
	Sabbaton, F. A. (See Goodfellow & Sabbaton.)					
	Sabbaton, F. A., administrator. (See Sabbaton, P. A.) (Extension.)					
139, 083	Sabbaton, F. A., Troy, N. Y. Manufacture of gas	May 20, 1873	564	177	3	566
	Sabbaton, P. A., deceased, by F. A. Sabbaton, administrator, Troy, N. Y. Door-frame for furnaces (Extension)	June 21, 1873	.....	.....	3	662
	Sabin, E. D. (See Cole & Sabin.)					
5, 242	Sabin, H. W., deceased, by C. E. Cox, executrix, West Somerset, N. Y. Horse-hay rake. (Reissue)	Jan. 21, 1873	635	207	3	86

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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5,243	Sabin, H. W., deceased, by C. E. Cox, executrix, West Somerset, N. Y. Horse-hay rake..... (Reissue)...	Jan. 21, 1873	637	208	3	87
5,244	Same..... same..... (Reissue)...	Jan. 21, 1873	639	208	3	87
5,245	Same..... same..... (Reissue)...	Jan. 21, 1873	641	208	3	87
136,674	Sachse, L., Monmouth, Oreg. Wheel-plow.....	Mar. 11, 1873	298	99	3	278
143,848	Sack, W. M., Oakland, Cal. Tenoning-machine.....	Oct. 21, 1873	434	144	4	434
	Sackett, G. (See Mettais, C. J., assignor.)					
142,586	Sackman, J. M., assignor to self and J. D. Marot, Ridgeville, Ind. Extension-table.....	Sept. 9, 1873	244	80	4	273
140,594	Sadler, H. J., and S. H. Spencer, Mecca, Ohio. Device for preventing cows from kicking.....	July 8, 1873	231	77	4	38
135,160	Sadler, J., New York, N. Y. Tube-welding machine.....	Jan. 21, 1873	606	197	3	84
141,517	Sadler, S. J., and H. Volmar, Cleveland, Ohio. Feed-water heater and purifier.....	Aug. 5, 1873	95	29	4	142
138,201	Safely, J. J., Ottumwa, Iowa. Portable punch.....	Apr. 22, 1873	849	269	3	459
140,648	Saffery, W. J., Bremen, Ohio. Seed-planter.....	July 8, 1873	276	93	4	42
	Safford, H. (See Orput, J. M., assignor.)					
142,734	Safford, H. B., Lancaster, N. Y. Coal-hcd.....	Sept. 9, 1873	366	123	4	283
139,194	Safley, R., Seneca Falls, N. Y. Water-regulator and alarm for boilers.....	May 20, 1873	668	209	3	575
139,921	Sagar, G., assignor to Chicago Waste-Cleansing Company, Chicago, Ill. Cleaning cotton-waste.....	June 17, 1873	455		3	668
141,388	Sage, F. I., Springfield, Mass. Cement-pipe mold.....	July 29, 1873	987	320	4	124
144,359	Sahm, E., Greenville, Pa. Carpenter's gauge.....	Nov. 4, 1873	157	52	4	491
138,941	Sajno, F., Milan, Italy. Apparatus for freezing liquids.....	May 13, 1873	425	133	3	543
5,359	Saladee, C. W., Saint Catharine's, Canada, assignor of one-half interest to L. Dobbins, Erie, Pa. Car-spring for vehicles..... (Reissue)...	Apr. 15, 1873	659	207	3	435
135,369	Saladee, C. W., Saint Catharine's, Canada. Buffer-spring for railroad-cars.....	Jan. 28, 1873	818	264	3	113
137,324	Same..... Road-wagon.....	Apr. 1, 1873	43	13	3	360
137,963	Same..... same.....	Apr. 15, 1873	620	196	3	432
5,399	Saladee, C. W., Pittsburgh, Pa. Whiffle-tree snap-hook..... (Reissue)...	May 6, 1873	243	75	3	517
138,699	Same..... same.....	May 6, 1873	205	65	3	514
145,365	Same..... Railway-car.....	Dec. 9, 1873	293	99	4	621
145,366	Same..... same.....	Dec. 9, 1873	294	99	4	621
145,594	Same..... Wagon-standard.....	Dec. 16, 1873	505	166	4	650
146,100	Same..... Vehicle-spring.....	Dec. 30, 1873	978	316	4	711
	Salem Shade-Roller Manufacturing Company. (See Tripp, L. A., assignor)..... (Reissue)...					
138,531	Salisbury, A. E., and S. S. Steel, Martin, Ohio. Barrel-heater.....	May 6, 1873	58	19	3	502
	Salisbury, S., et al. (See Mears, H. A., assignor.)					
5,623	Salmon, I. A., Boston, Mass. Dental instrument..... (Reissue)...	Oct. 21, 1873	533	176	4	442
139,618	Salmon, T. H., Brooklyn, N. Y. Heating-stove.....	June 3, 1873	151	50	3	621
140,595	Salver, W. H., Hamburg, Iowa, assignor of one-half interest to J. M. Campbell and D. Ritchey. Earth-boring machine.....	July 8, 1873	231	78	4	38
141,892	Salver, W. H., Corning, Iowa, assignor of one-half interest to J. M. Campbell. Earth-auger.....	Aug. 19, 1873	454	148	4	189
146,024	Sambrook, W., Liverpool, England. Feed-water heater.....	Dec. 30, 1873	911	295	4	705
142,414	Sammis, E. M., Babylon, N. Y. Lemon-squeezer.....	Sept. 2, 1873	81	27	4	249
144,480	Sample, W. H., Albany, N. Y. Cutting-attachment for sewing-machines.....	Nov. 11, 1873	268	91	4	512
	Sampson, E. C. (See Meyer, C. T. and V. E., assignors)..... (Design.)					
138,820	Sampson, I. B., Albany, N. Y. Cork for bottles.....	May 13, 1873	324	106	3	534
	Sampson, J. L., et al. (See Picking & Hopkins, assignors.)					
	Sampson, M. (See Beman, W. E., assignor.)					
143,467	Samson, S. D., Woburn, and G. H. Smith, Waltham, Mass. Stereoscopic-picture holder ..	Oct. 7, 1873	58	20	4	385
145,017	Samuels, J., Vineland, N. J., assignor to W. G. Hill, Cambridge, and L. B. Russell, Lynn, Mass. Machine for making heel-stiffeners.....	Nov. 25, 1873	736	248	4	572
	Sanborn, B., et al. (See Mears, H. A., assignor.)					
	Sanborn, G. P., deceased, by W. R. Sanborn, administrator, Bridgeport, and W. Mansfield, New Haven, Conn. Elastic railway-frog..... (Extension)...	July 5, 1873			4	6
143,468	Sanborn, L. D., Cohoes, N. Y. Knitting-machine.....	Oct. 7, 1873	59	21	4	385
142,654	Sanborn, R. S., Rockford, Ill. Joint-connection for hollow railway-rails.....	Sept. 9, 1873	299	98	4	278
	Sanborn, W. A., administrator. (See Sanborn & Mansfield)..... (Extension.)					
142,284	Sanders, G. N., jr., New York, N. Y. Spike.....	Aug. 26, 1873	805	266	4	227
140,844	Sanders, G. N. and G. N., jr., New York, N. Y. Spike.....	July 15, 1873	445	152	4	64
	Sanders, J. (See Lawrence & Sanders.)					
136,549	Sanders, L., Brooklyn, N. Y. Clasp for leather belts.....	Mar. 4, 1873	179	58	3	259
145,970	Sanderson, E., Paris, France. Windmill.....	Dec. 30, 1873	867	281	4	702
	Sanderson, R. (See Zimmer, J., assignor.)					
143,933	Sanderson, S., New Bedford, Mass. Plumb and level.....	Oct. 21, 1873	500	169	4	439
	Sands & Baxter. (See Baxter, W. D., assignor.)					
143,849	Sanford, E., Hartford, Conn. Mode of securing wheel-hubs to shafts.....	Oct. 21, 1873	436	145	4	434
136,338	Sanford, G., Stroudsburg, Pa. Machine for dressing brasses of journal-boxes.....	Feb. 25, 1873	873	281	3	233
142,870	Sanford, W. L., Ashton, Ill. Binder's attachment for harvesters.....	Sept. 16, 1873	489	167	4	304
	Sanger, K. (See Sanger, W. H. M., assignor.)					
135,161	Sanger, W. H. M., assignor to K. Sanger, Bay Side, N. Y. Car-brake.....	Jan. 21, 1873	607	197	3	84
136,870	Sargeant, A. V., Newark, N. J. Harness-saddle.....	Mar. 18, 1873	470	156	3	301
132,415	Same..... Check-hook for harness-saddles.....	Sept. 2, 1873	81	27	4	249
	Sargeant, S. S. (See Mashmeyer, J. A., assignor)..... (Reissue)...					
	Sargent & Co. (See Steele, E. J., assignor)..... (Design.)					
	Same..... (See Wunder, A., assignor)..... (Design.)					
	Sargent & Greenleaf. (See Morrison, H. B., assignor.)					
134,935	Sargent, C. G., Graniteville, Mass. Apparatus for dyeing and washing fibrous materials.....	Jan. 14, 1873	403	129	3	52
	Sargent, G. M. (See Hill & Sargent.)					
142,945	Sargent, J., Rochester, N. Y. Machine for corrugating and beading sheet-metal pipe....	Sept. 16, 1873	553	187	4	309
140,080	Sargent, J. F., Manchester, N. H. Metallic corner-shield for boxes.....	June 17, 1873	586	186	3	680
141,081	Sargent, S. D., Hartford, Conn., assignor to The Stanley Rule and Level Company, New Britain, Conn. Carpenter's level.....	July 22, 1873	681	228	4	92
	Sargent, S. J. (See Batchelder & Sargent.)					
142,817	Sargent, W. D., Philadelphia, Pa. Telegraph switch-board ..	Sept. 16, 1873	446	151	4	300
136,007	Sarsfield, J. C., New York, N. Y. Valve for gas-regulators.....	Feb. 18, 1873	570	188	3	198
	Satterly, C. (See Pike, D., assignor.)					
135,594	Sattley, M., Taylorville, Ill. Wheel-plow.....	Feb. 4, 1873	190	59	3	142
	Sauer, A. (See Barth, G. M., assignor.)					
135,370	Saugi, J. E., Washington, D. C. Cider-mill.....	Jan. 28, 1873	819	265	3	113
	Saulpaw, G. W. (See Fryer, R. M., assignor.)					
141,017	Sault, J., South Manchester, Conn. Machine for spreading silk.....	July 22, 1873	626	211	4	87
	Saunders, C. (See Walters, A. B., assignor.)					
134,936	Saunders, D. R., Houston, Tex. Fluting-machine.....	Jan. 14, 1873	405	130	3	52
135,371	Saunders, H., South Kingston, R. I. Ship's lantern.....	Jan. 28, 1873	820	265	3	113
138,532	Same..... same.....	May 6, 1873	58	20	3	502
144,928	Saunders, J., Brooklyn, N. Y. Manufacture of sulphuric acid.....	Nov. 25, 1873	661	224	4	566

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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141, 820	Saunders, J. E., <i>et al.</i> (See Blackman, A. L., assignor.) (Reissue.) Saunders, O. F., Corning, N. Y. Pane for sky-lights	Aug. 12, 1873	375	123	4	173
142, 124	Savage, D. (See Shive & Savage.) Savage, J. B. (See Miller, R. R., assignor.) Savage, J. S., Kingston, N. H. Registering ballot-box	Aug. 26, 1873	674	222	4	216
139, 195	Savage, J. W., and F. M. Doty, Parmitchie, Miss. Corn and cotton planter	May 20, 1873	669	209	3	575
139, 922	Savery, C. C., Philadelphia, Pa. Filter	June 17, 1873	455	142	3	668
139, 196	Saville, I. N. C., Worcester, Mass. Last	May 20, 1873	670	210	3	575
145, 531	Savoral, E., assignor to E. Schnautz and E. Savoral, New York, N. Y. Lamp-stove	Dec. 16, 1873	456	149	4	646
144, 360	Sawdey, C. W., Poolville, N. Y. Cattle-stanchion	Nov. 4, 1873	158	52	4	491
145, 757	Sawkins, J. N., Langport, England. Game-apparatus	Dec. 23, 1873	660	215	4	675
137, 100	Sawyer, A. C., Canton, N. Y. Tailor's pressing-machine Sawyer, C. E. (See Houck & Sawyer.) Same. (See Perkins, Moulton & Sawyer.)	Mar. 25, 1873	682	226	3	329
135, 446	Sawyer, C. K., and G. F. Wright, Clinton, Mass. Loom-shuttle	Feb. 4, 1873	51	17	3	131
143, 097	Sawyer, D., Washington, Ind. Nut-lock	Sept. 23, 1873	685	236	4	330
6, 489	Sawyer, H., Chelsea, Mass. Bottle (Design) Sawyer, H. W. (See Tarble & Sawyer.)	Mar. 4, 1873			3	245
145, 971	Sawyer, J., Northfield, Vt. Process for cleaning marble, granite, &c.	Dec. 30, 1873	868		4	702
145, 904	Sawyer, J. H. & Co. (See Bacon, C. H., assignor.) Sawyer, L., Springfield, Vt. Umbrella	Dec. 23, 1873	786	257	4	685
145, 905	Sawyer, O. A., Lowell, Mass. Loom-picker	Dec. 23, 1873	787	257	4	685
139, 820	Sawyer, P. C., Macon, Ga. Cotton-gin Sawyer, W. H., <i>et al.</i> (See Lockwood, R. M., assignor.) Sawyer, W. H., American District Telegraph Company, New York, N. Y. Telegraph-register	June 10, 1873	357	110	3	653
5, 716	Sax, J. K., Pittston, Pa. Casting car-wheels (Reissue)	Dec. 2, 1873	83	27	4	592
142, 587	Sax, J. K., Pittston, and G. W. Kear, Kingston, Pa. Car-wheel	Dec. 30, 1873	1,010	325	4	714
141, 082	Saxton, E. S., Greenfield, Ill. Clothes-pounder Saxton, P., <i>et al.</i> (See Moloney, J., assignor.)	Sept. 9, 1873	245	80	4	273
144, 704	Sayler, H., Saint Paris, Ohio. Carriage-top Sayles, J. M. (See Lincoln, J. B., assignor.)	July 22, 1873	682	229	4	92
137, 800	Sayre, B. C., Montrose, Pa. Hot-air furnace Sayre, J. W., and A. S. Shull, Martin's Creek, Pa., said Sayre assignor of one-third, and said Shull assignor of whole interest to H. W. Harper. Machine for dressing the edges of slate-frames	Nov. 18, 1873	464	157	4	539
5, 322	Sayre, J. W., and A. S. Shull, Martin's Creek, Pa., said Sayre assignor of one-third, and said Shull assignor of whole interest to H. W. Harper. Machine for dressing the edges of slate-frames	Apr. 15, 1873	485	151	3	421
145, 018	Sayrs, I. (See Johnson, J. W., assignor.) Scammon, G. S. (See Chase, F., assignor.) Scanlon, M. A., executor. (See Murphy, T. G.)	Mar. 11, 1873	413	136	3	287
145, 689	Scarborough, J. R., Milburn, Ky. Broad-cast seeder	Nov. 25, 1873	737	249	4	572
140, 219	Schacher, C., and L. Feret, Paris, France. Furnace	Dec. 16, 1873	586	192	4	657
139, 821	Schacht, W., Brooklyn, N. Y. Rotary stamp-canceller Schaefer, C. A., Chicago, Ill. Adjustable try-square Schaeffer, F. J. (See Myers, C., assignor.)	June 24, 1873	726	228	3	699
144, 636	Schaefer, D., Parkersburgh, W. Va. Writing-desk, &c.	June 10, 1873	358	111	3	653
138, 101	Schaefer, G. W., Saint Charles, Mo. Machine for paring horses' hoofs	Nov. 18, 1873	407	137	4	534
138, 942	Schaefer, L., jr., Mount Carmel, Ill. Potato-digger	Apr. 22, 1873	761	242	3	453
138, 585	Schaff, G. & J. A., Chicago, Ill. Desk Schaff, J. A. (See Schaff, G. & J. A.) Schalk, E., New York, N. Y. Oil-still	May 13, 1873	425	133	3	543
136, 008	Schalk, J., jr., Guttentburgh, N. J. Self-measuring oil-tank	May 6, 1873	105	33	3	506
139, 084	Same. Measuring-faucet	Feb. 18, 1873	571	189	3	198
143, 850	Schaller, C. A., Philadelphia, Pa. Artificial flowers	May 20, 1873	564	177	3	566
142, 353	Scharl, B., Boston, Mass. Cap	Oct. 21, 1873	436	145	4	434
137, 032	Schastey, G. A., New York, N. Y. Adjustable reclining-chair	Sept. 2, 1873	28	10	4	244
145, 595	Schatz, A. E., New York, N. Y. Device for fastening clothes-lines, &c.	Mar. 18, 1873	610	202	3	313
138, 943	Same. Pencil-sharpener	Dec. 16, 1873	506	166	4	650
143, 934	Schedler, J., Jersey City Heights, N. J. Apparatus for teaching geography	Mar. 11, 1873	374	124	3	284
140, 220	Scheide, W. T., Tidioute, Pa. Apparatus for burning liquid fuel and generating steam	May 13, 1873	426	134	3	543
141, 955	Scheidler, R., and J. H. McNamar, Newark, Ohio. Portable steam-engine	Oct. 21, 1873	500	169	4	439
144, 241	Schemioth, C., deceased, by W. Westlake, administrator, London, assignor to J. Head, Ipswich, England. Steam-boiler and other furnaces	June 24, 1873	726	229	3	699
138, 533	Schenck, M. P., Fulton, N. Y. Cider-mill	Aug. 19, 1873	503	166	4	193
136, 550	Schenck, R. C., jr., Dayton, Ohio. Link	Nov. 4, 1873	64	20	4	483
142, 517	Scherer, M. M., Batesville, Ark. Cotton-press	May 6, 1873	59	20	3	502
145, 367	Schermerhorn, C., New York, N. Y. Towel-rack	Mar. 4, 1873	180	58	3	259
144, 569	Schermerhorn, J. I., Schenectady, N. Y. Device for rounding the ends of bolts	Sept. 2, 1873	175	57	4	256
142, 735	Scherpe, J. F., Saint Louis, Mo. Window-screen Schieder, G. (See Edwards & Schieder.) Same. same. (Reissue.)	Dec. 9, 1873	294	99	4	621
146, 025	Schierloh, H., <i>et al.</i> (See Popping, J., assignor.) Schiffer, J. G., San Francisco, Cal. Malt-drier	Nov. 11, 1873	343	116	4	517
134, 566	Schindler, A., Lancaster, Pa. Coating for writing-tablets	Sept. 9, 1873	367	124	4	283
139, 266	Same. Writing-tablet	Dec. 30, 1873	912	295	4	705
139, 425	Schindler, S. S., West Meriden, Conn. Game-table	Jan. 7, 1873	60		3	12
136, 460	Schirek, A. & J., and J. Smith, Rochester, N. Y. Manufacture of carriage-axles Schirek, J. (See Schirek & Smith.) Schirmayer, F. J., Milwaukee, Wis. Wash-boiler	May 27, 1873	746		3	589
138, 586	Schleier, T. M., Knoxville, Tenn. Mustard-pot	May 27, 1873	886	285	3	600
140, 221	Schlesser, N., Chicago, Ill. Rotary vegetable-cutter	Mar. 4, 1873	89	31	3	253
138, 046	Schlich, F., and A. Feyh, New York, N. Y. Bottle-washing apparatus	May 6, 1873	105	34	3	506
138, 534	Same. Bottle-filling apparatus Schloesser, H. J., <i>et al.</i> (See Kayser, L., assignor.) Schmalhausen, H., Bridgeport, Ill. Trotting-gear	Feb. 4, 1873	191	59	3	142
142, 871	Schmeltzer, J. F., and J. M. Roberts, Winona, Minn. Instrument to loosen dried fruits	June 24, 1873	727	229	3	699
144, 147	Schmid, A. (See Smith & Schmid.) Schmid, J. B., Salem, Va. Saw-setting device	Apr. 22, 1873	715	226	3	449
137, 150	Schmidt, E., Pittsburgh, Pa. Stirrer for malt-kilns	May 6, 1873	60	20	3	502
138, 288	Schmidt, H. (See McCosker, P., assignor.) Schmidt, H., Albany, N. Y. Pole for vehicles	Sept. 16, 1873	491	167	4	304
141, 957	Schmidt, H., Chicago, Ill. Bolt and rod cutter	Oct. 28, 1873	705	234	4	466
142, 354	Schmidt, J. (See Hoffmeyer & Schmidt.) Schmitt, F., Milwaukee, Wis. Beer-cooler	Mar. 25, 1873	723	240	3	333
138, 289	Schmitt, F., Milwaukee, Wis. Beer-cooler	Apr. 29, 1873	955	300	3	476
135, 596	Schmitt, R., Newark, N. J. Traveling-bag	Aug. 19, 1873	504	166	4	193
		Sept. 2, 1873	29	11	4	244
		Apr. 29, 1873	956	301	3	476
		Feb. 4, 1873	192	60	3	142

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139, 822	Schmitz, J. N., Kilbourn City, Wis. Horse-collar.....	June 10, 1873	359	111	3	653
	Schmoele, C. (See Schmoele, W. F. and H., jr., assignors.)					
	Schmoele, H., jr. (See Schmoele, W. F. and H., jr.)					
145, 532	Schmoele, W. F. and H., jr., Philadelphia, Pa., assignors of one-third interest to C. Schmoele. Electro-pneumatic action for musical instruments.....	Dec. 16, 1873	457	149	4	646
	Schnapp, M. (See Reichhardt & Schnapp.)					
145, 019	Schrapp, M., Pleasant Park, Mo. Seeding-machine.....	Nov. 25, 1873	737	249	4	572
136, 769	Schnauffer, W., Baltimore, Md. Stereotype-plate holder.....	Mar. 11, 1873	375	124	3	284
	Schnautz, E., and E. Savoral. (See Savoral, E., assignor.)					
139, 085	Schneider, C., Newark, N. J. Filter for water-coolers.....	May 20, 1873	565	177	3	567
139, 823	Schneider, J. B., Kankakee, Ill. Wheelbarrow.....	June 10, 1873	360	111	3	653
139, 197	Schneider, J. F., assignor to self and P. Lenhart, Brooklyn, N. Y. Refrigerator and mode of cooling.....	May 20, 1873	671	210	3	575
	Schneider, L. (See Schneider & Montgomery, assignors.) (Reissue)					
5, 372	Schneider, L., Williamsport, Pa., and J. A. Montgomery, Springfield, N. J., assignors to L. Schneider. Draw-bridges..... (Reissue)	Apr. 22, 1873	883	279	3	462
	Schneidt, C. (See Beck & Schneidt.)					
139, 424	Schneller, G. O., Ansonia, Conn. Corset-fastening.....	May 27, 1873	885	285	3	600
140, 733	Same..... Corset-spring.....	July 8, 1873	345	117	4	48
	Schöberl, J. (See Nissle & Schöberl.)					
136, 551	Schoellhorn, P. A., Buffalo, N. Y. Peg-float.....	Mar. 4, 1873	181	58	3	260
141, 956	Same..... Crimping-clamp.....	Aug. 19, 1873	504	166	4	193
137, 243	Schoenhut, A., Philadelphia, Pa. Musical instrument.....	Mar. 25, 1873	812	267	3	339
144, 148	Same..... Sounding-plate for musical instruments.....	Oct. 28, 1873	706	234	4	466
144, 867	Schoettle, J. C., Collinsville, Ill. Hog-ringing pinchers.....	Nov. 25, 1873	615	209	4	562
140, 168	Schoevers, A. T. C., Hague, Holland. Truss.....	June 24, 1873	684	215	3	695
142, 872	Schofield, D., Gloucester, N. J. Calendering-machine.....	Sept. 16, 1873	491	167	4	304
135, 372	Schofield, E., Worcester, Mass. Combined inhaler and nasal-douche.....	Jan. 28, 1873	820	265	3	113
142, 518	Same..... Wash-boiler.....	Sept. 2, 1873	175	58	4	256
145, 758	Same..... Inhaling-apparatus.....	Dec. 23, 1873	661	316	4	675
138, 047	Schofield, G. W., United States Army. Revolving fire-arm.....	Apr. 22, 1873	715	226	3	449
138, 202	Schofield, J., assignor to J. Haworth and T. H. McCollin, Philadelphia, Pa. Guide for cutting out photographs.....	Apr. 22, 1873	850	269	3	460
143, 098	Schofield, T., Grass Valley, Cal. Needle-threader for sewing-machines.....	Sept. 23, 1873	686	236	4	330
143, 303	Schofield, W. H., Somerville, assignor of one-half interest to J. F. Donnell, Cambridgeport, Mass. Shuttle for sewing-machines.....	Sept. 30, 1873	861	295	4	361
138, 290	Schofield, F., Chicago, Ill. Stereotype-plate holder.....	Apr. 29, 1873	956	301	3	476
145, 906	Schofield, I., Dunlap, assignor of one-half interest to B. F. Frederick, Marshall County, Iowa. Middlings-purifier.....	Dec. 23, 1873	787	{ 257 } { 258 }	{ 4 }	{ 685 }
	Schofield, S. (See Wightman, D. A., assignor.)					
135, 597	Schofield, S., Providence, R. I., and C. E. Baker, Mont Clair, N. J. Paper-feeding machine.....	Feb. 4, 1873	193	60	3	142
135, 598	Same..... same.....	Feb. 4, 1873	194	60	3	142
135, 599	Same..... same.....	Feb. 4, 1873	197	61	3	143
139, 426	Schofield, S., Providence, R. I. Saw.....	May 27, 1873	887	285	3	600
140, 845	Same..... Cigar-machine.....	July 15, 1873	446	152	4	64
140, 846	Same..... same.....	July 15, 1873	447	152	4	64
140, 847	Same..... Cigar-trimmer.....	July 15, 1873	448	153	4	64
140, 848	Same..... Machine for making cigar-bunches.....	July 15, 1873	449	153	4	64
140, 849	Same..... Cigar-wrapping machine.....	July 15, 1873	451	153	4	64
140, 850	Same..... Apparatus for arranging cigar-fillers.....	July 15, 1873	453	153	4	64
140, 081	Schollhorn, W., New Haven, Conn. Pencil-attachment for dividers.....	June 17, 1873	587	186	3	680
137, 725	Schönberg, J., New York, N. Y. Stage-machinery.....	Apr. 8, 1873	409	126	3	402
	Schoneman, R. A. (See O'Neil, J., assignor.)					
145, 759	Schooler, J. E., assignor of one-half interest to J. S. Weaver, Chillicothe, Mo. Feather-renovator.....	Dec. 23, 1873	662	216	4	675
143, 099	Schorg, A., and B. Van Valkenburgh, Cobleskill, N. Y. Car-coupling.....	Sept. 23, 1873	686	236	4	330
	Schormann, L. (See Thiele, A., assignor.)					
134, 772	Schottky, H. A., and T. Simendinger, Hartford, Conn. Gun-sight.....	Jan. 14, 1873	259	85	3	41
145, 907	Schpakowsky, A., assignor to B. Hoffmark, St. Petersburg, Russia. Driving-belt.....	Dec. 23, 1873	788	258	4	685
142, 736	Schrack, J., Philadelphia, Pa. Shuttle-box mechanism..... (Design.)	Sept. 9, 1873	367	124	4	283
	Schrader, J. C. (See Mathiesen & Schrader.)					
5, 236	Schrag, P., and P. Hufeland, New York, N. Y., assignors to E. Faber. Machine for cutting off lead-pencils..... (Reissue)	Jan. 14, 1873	436	138	3	65
140, 546	Schramm, I. C., Des Moines, Iowa. Wash-boiler attachment.....	July 1, 1873	174	59	4	22
138, 442	Schröder, B., Newark, N. J. Shaft for vehicles.....	Apr. 29, 1873	1,090	344	3	487
	Schucht, J. H. (See Goffrie & Schucht.)					
	Schnellermann, J. C., executor. (See Siebrich, C.)..... (Reissue.)					
142, 946	Schuff, P., New York, N. Y. Malt-drier.....	Sept. 16, 1873	554	188	4	309
145, 533	Schulenburg, C., Detroit, Mich. Billiard-table.....	Dec. 16, 1873	458	150	4	646
145, 453	Schulke, W., Hamilton, Ohio. Pipe-organ valve.....	Dec. 9, 1873	367	122	4	627
143, 259	Schullian, C., New York, N. Y. Ruffler for sewing-machines.....	Sept. 30, 1873	823	282	4	358
135, 162	Schultz, F. W., assignor of one-half interest to W. E. Beatty, Mount Pleasant, Iowa. Excavator.....	Jan. 21, 1873	607	198	3	84
139, 267	Schultz, J. F., Chicago, Ill. Self-waiting table.....	May 27, 1873	746	236	3	589
142, 519	Schultz, L., College Point, N. Y. Hemmer for sewing-machines.....	Sept. 2, 1873	176	58	4	256
134, 706	Schultze, C. J., Vienna, Austria. Apparatus for mixing soap and other materials.....	Jan. 7, 1873	195	63	3	22
	Schulz, J. (See Pawlewski & Schulz.)					
139, 824	Schulz, L., Cincinnati, Ohio. Coffee-mill.....	June 10, 1873	361	111	3	653
142, 046	Schulze, L., Philadelphia, Pa. Cooling and purifying air in breweries, packing-houses, and other buildings.....	Aug. 19, 1873	590	{ 193 } { 194 }	{ 4 }	{ 200 }
143, 592	Schulze, L., Chicago, Ill. Car axle-box.....	Oct. 14, 1873	180	61	4	404
140, 547	Schulze, O., Saint Louis, Mo. Music-stand.....	July 1, 1873	174	59	4	22
136, 552	Schumacher, H., Philadelphia, Pa. Folding knife and fork.....	Mar. 4, 1873	181	58	3	260
134, 613	Schumann, F. C., New York, N. Y. Music portfolio.....	Jan. 7, 1873	106	35	3	15
144, 868	Schüssler, A., and C. F. Dieterich, New York, N. Y. Paper dry gas-meter.....	Nov. 25, 1873	616	.....	4	562
142, 125	Schüssler, C., New York, N. Y. Process of ornamenting glass.....	Aug. 26, 1873	676	.....	4	216
136, 770	Schutzenberger, P., and F. de Lalande, Paris, France. Preparation of indigo for dyeing and printing.....	Mar. 11, 1873	375	.....	3	284
140, 082	Schuyler, I. S., and S. I. Thursby, Brooklyn, N. Y. Elevator for buildings.....	June 17, 1873	528	186	3	680
145, 245	Schuyler, J. F., Fostoria, Ohio. Guard for preventing leakage around chimneys.....	Dec. 2, 1873	184	63	4	600
136, 009	Schwaab, A., New York, N. Y. Barber's chair.....	Feb. 18, 1873	572	189	3	198
142, 520	Schwartz, C. C. E., assignor of one-half interest to C. Borm, Philadelphia, Pa. Decorative lantern.....	Sept. 2, 1873	177	58	4	256
	Schwartz, H. (See Schwartz, J., assignor.)					
139, 198	Schwartz, J., assignor to self and H. Schwartz, Philadelphia, Pa. Guttering-tongs.....	May 20, 1873	672	210	3	575

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Schwartz, M. (See Peavey, H., assignor.)					
	Schwarz, C. G. (See Gebhard & Schwarz.)					
	Schwarz, S. (See Lenn, J. F., assignor.)					
141, 670	Schwarzenbach, V., Berne, Switzerland. Process of gilding on glass.....	Aug. 12, 1873	244	.....	4	163
141, 293	Schwatka, F., United States Army. Bridge-truss.....	July 29, 1873	890	292	4	117
	Schwenk, S. K., et al. (See Blackman, A. L., assignor.)..... (Reissue.)					
	Schwennesen, H. P. (See Schwennesen, J., assignor.)					
140, 649	Schwennesen, J., assignor to H. P. Schwennesen, Chicago, Ill. Toy.....	July 8, 1873	277	94	4	42
143, 304	Scofield, L., jr., Atlanta, Ga. Elastic seat for railway-rail joints.....	Sept. 30, 1873	861	295	4	361
144, 869	Scofield, L., assignor to self and J. B. Wait, Grand Haven, Mich. Ironing-table.....	Nov. 25, 1873	617	210	4	562
141, 893	Scofield, L. T., Cleveland, Ohio. Pipe coupling.....	Aug. 19, 1873	455	148	4	189
141, 466	Scott, A., Rochester, N. Y. Corn-harvester.....	Aug. 5, 1873	51	16	4	139
134, 707	Scott, A. M., and T. Wilson, Clearmont, Mo. Device for holding hogs in veterinary operations.....	Jan. 7, 1873	196	63	3	22
138, 203	Scott, D. A., Cincinnati, Ohio. Spring-fastener for bed-bottoms.....	Apr. 22, 1873	850	269	3	460
144, 361	Scott, D. A., and A. W. Hiltz, Calais, Me., assignors to C. & E. Curran, Milltown, New Brunswick, M. L. Whitney, and A. W. Hiltz, Calais, Me. Fire-escape.....	Nov. 4, 1873	158	52	4	491
	Scott, E. E. (See Hawthorn & Scott.)					
143, 260	Scott, E. E., assignor of two-thirds interest to G. E. Smith and J. Wilson, Beloit, Wis. Butter-worker.....	Sept. 30, 1873	824	283	4	358
143, 720	Scott, E. R., Noblesville, Ind. Car-coupling.....	Oct. 14, 1873	303	100	4	413
5, 400	Scott, E. W., Wauregan, Conn., assignor to self and A. Searls, Newark, N. J. Whip-socket..... (Reissue.)	May 6, 1873	244	76	3	517
138, 048	Scott, J., Philadelphia, Pa. Strike or keeper for door-locks.....	Apr. 22, 1873	718	226	3	449
144, 035	Scott, J., assignor of one-half interest to R. Gill, Antwerp, N. Y. Fence-post.....	Oct. 28, 1873	613	203	4	458
140, 083	Scott, Q. A., Pittsburgh, Pa. Grain-binder.....	June 17, 1873	589	186 187	3	680
140, 548	Same..... Hand-trunk and hat-box.....	July 1, 1873	175	60	4	22
142, 947	Scott, R., Philadelphia, Pa. Carpet.....	Sept. 16, 1873	554	188	4	310
142, 285	Scott, S. D., Eureka, Cal. Hand-wagon.....	Aug. 26, 1873	806	266	4	227
138, 347	Scott, T., assignor of one-half interest to A. Kenrick, Saint Paul, Minn. Gage for setting axle-boxes.....	Apr. 29, 1873	1,006	316	3	480
144, 870	Scott, W., Birmingham, and W. J. Matthews, Aston, England. Breech-loading fire-arm.....	Nov. 25, 1873	618	210	4	562
146, 026	Scott, W., Floyd Court-House, Va. Blade for agricultural implements.....	Dec. 30, 1873	913	296	4	706
	Scott, W. A., et al. (See Woodhouse, J. Y., assignor.)					
	Scovill Manufacturing Company. (See Thomas, G. C., assignor.)					
138, 765	Scow, A. F., Chicago, Ill. Basket-form.....	May 13, 1873	277	86	3	530
139, 025	Same..... same.....	May 20, 1873	508	160	3	562
	Scrannage, D'Este & Co. (See Scrannage, E., jr., assignor.)					
138, 700	Scrannage, E., jr., Melrose, Mass., assignor to Scrannage, D'Este & Co. Faucet.....	May 6, 1873	206	65	3	514
137, 726	Scrimgeour, R. C., Brooklyn, N. Y. Bath-tub plug-socket.....	Apr. 8, 1873	410	126	3	402
144, 036	Scripture, E. S., Brooklyn, N. Y. Wrench.....	Oct. 28, 1873	614	203	4	458
142, 737	Scripture, E. S., and W. Stackman, Brooklyn, N. Y. Railway-car heater.....	Sept. 9, 1873	369	124	4	283
136, 771	Scriven, J. A., New York, N. Y. Shirt-front.....	Mar. 11, 1873	376	124	3	284
	Seabert, F. A. (See Anthony & Seabert.)					
	Seabury, H. (See Fales & Seabury.)					
5, 585	Seal, C. E. (See Brooks, E. F., assignor.)					
	Seal, C. E., Winchester, Va., assignor of one-half interest to E. F. Brooks. Cut-off and regulating-cock for gas..... (Reissue.)	Sept. 30, 1873	953	321	4	368
140, 549	Seal, C. E., Winchester, Va., assignor of one-half interest to E. F. Brooks, Baltimore, Md. Cut-off and regulating-cock for gas.....	July 1, 1873	176	60	4	23
142, 521	Seal, C. E., Winchester, Va., and E. F. Brooks, Baltimore, Md. Regulating-cock.....	Sept. 2, 1873	178	58	4	256
144, 705	Seaman, J., Groton, N. Y. Clothes-wringer.....	Nov. 18, 1873	465	157	4	539
	Searle, J. G. (See Payne, W. L., assignor.)					
135, 012	Searle, J. Q. C., Topeka, Kans. Stove-leg.....	Jan. 21, 1873	485	156	3	74
136, 772	Same..... Base-burning stove.....	Mar. 11, 1873	377	125	3	284
136, 773	Same..... Railway-car stove and heater.....	Mar. 11, 1873	378	125	3	285
	Searls, A. (See Scott, E. W., assignor.)..... (Reissue.)					
6, 581	Searls, A., Newark, N. J. Carriage-pole trimming..... (Design.)	Apr. 8, 1873	.....	.....	3	387
6, 593	Same..... Back cross-strap mountings for carriages..... (Design.)	Apr. 15, 1873	.....	.....	3	417
139, 026	Same..... Whip-socket.....	May 20, 1873	508	160	3	562
	Sears, A. R. (See Orr & Sears.)					
136, 185	Sears, E. B., San Francisco, Cal. Compound for destroying insects, vermin, &c.....	Feb. 25, 1873	743	.....	3	223
	Sears, G. E. (See White, J. N., assignor.)					
137, 244	Sears, J., Chicago, Ill. Soldering-tool.....	Mar. 25, 1873	813	267	3	339
141, 595	Same..... Spice-box.....	Aug. 5, 1873	158	51	4	148
143, 190	Sears, W. H., Cheshire, Conn., assignor to T. Stowe, Readsborough, Vt. Bed-bottom.....	Sept. 23, 1873	758	261	4	336
	Seaver, A. (See Keith & Seaver.)					
137, 245	Seaver, G. F., E. W. Southworth, and J. M. Anthony, Ashland, Mass. Machine for pressing the soles of boots and shoes.....	Mar. 25, 1873	814	267	3	339
141, 958	Seavey, C. A., Hodgdon's Mills, Me. Steering-apparatus.....	Aug. 19, 1873	505	167	4	193
	Seavey, G. F., et al. (See Seavey, J. E., assignor.)					
146, 027	Seavey, J. E., assignor to self, R. P. Tibbetts, and G. F. Seavey, Kennebunkport, Me. Bevel rest.....	Dec. 30, 1873	913	296	4	706
140, 169	Sebille, R., Baltimore, Md. Potato masher and strainer.....	June 24, 1873	686	215	3	695
134, 614	Secomb, J. L., Chicago, Ill. Spring bed-bottom.....	Jan. 7, 1873	106	35	3	15
	Secombe Manufacturing Company. (See Holt, H., assignor.)..... (Reissue.)					
142, 522	Secor, E., Miles, Mich. Hanging-gates.....	Sept. 2, 1873	179	59	4	256
141, 894	Secor, J. B., Bridgeport, Conn. Shuttle for sewing-machines.....	Aug. 19, 1873	456	149	4	189
143, 034	Seddon, J., Susquehanna Depot, Pa. Rocking-grate.....	Sept. 23, 1873	634	216 217	4	326
142, 738	See, A. B., Yonkers, N. Y. Self-closing hatchway.....	Sept. 9, 1873	370	124	4	283
136, 010	Seebach, C., New York, N. Y. Process of polishing wood.....	Feb. 18, 1873	573	.....	3	198
143, 999	Seeley, E. A., Scotch Plains, N. J. Paper-drier.....	Oct. 28, 1873	585	194	4	456
137, 246	Seely, D. B., Sterling, Ill. Hand-planter.....	Mar. 25, 1873	816	268	3	340
	Sefton, W. E. (See Fawcett, E. W. & R., & Sefton.)					
	Segur, J. M. (See Kennedy, A. H., assignor.)..... (Reissue.)					
137, 489	Seib, J. N., Boston, Mass. Veneer-cutter.....	Apr. 1, 1873	193	59	3	373
141, 596	Same..... same.....	Aug. 5, 1873	159	51	4	148
145, 246	Same..... Machine for cutting veneers.....	Dec. 2, 1873	185	64	4	600
135, 013	Seiberling, J. F., Akron, Ohio. Harvester.....	Jan. 21, 1873	486	156	3	74
137, 490	Seiberling, J. F., Akron, Ohio, assignor to Climax Mower and Reaper Company, Corry, Pa. Harvester.....	Apr. 1, 1873	195	60	3	373
139, 268	Seiberling, J. F., Akron, Ohio. Harvester.....	May 27, 1873	747	237	3	589
	Seibert, C., et al. (See Johnson, J. J., assignor.)..... (Reissue.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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135, 600	Seibert, J., assignor to the Jones and Nimick Manufacturing Company, Pittsburgh, Pa. Folding-door key.....	Feb. 4, 1873	199	61	3	143
144, 481	Seibert, J., New York, N. Y. Soap-cutting machine.....	Nov. 11, 1873	269	91	4	512
138, 587	Seidenstricker, W. H., Hagerstown, Md. Apparatus for making confectionery.....	May 6, 1873	106	34	3	506
135, 601	Seifert F., Knoxville, Iowa. Harness-tug buckle.....	Feb. 4, 1873	199	61	3	143
145, 596	Seigh, J. W., Johnstown, Pa. Spark-arrester.....	Dec. 16, 1873	507	167	4	650
143, 593	Seislove, J., Tiffin, Ohio, assignor of one-half interest to J. Neligh. Car-coupling.....	Oct. 14, 1873	180	61	4	404
139, 086	Seitz, H., Palmyra, Mo. Wagon-brake shoe.....	May 20, 1873	566	177	3	567
134, 708	Selden, S., Erie, Pa. Attaching knobs to spindles.....	Jan. 7, 1873	196	63	3	22
142, 286	Selden, S., and O. R. Hanchett, assignors to Selden & Griswold Manufacturing Company, Erie, Pa. Pump bracket.....	Aug. 26, 1873	806	267	4	227
135, 163	Seldis, R. M., New York, N. Y. Muffs.....	Jan. 21, 1873	609	198	3	84
144, 149	Same..... Building-block.....	Oct. 28, 1873	706	235	4	466
135, 850	Selick, H., Lewistown, Pa. Plow.....	Feb. 11, 1873	427	139	3	172
138, 291	Selleck, J. L., Baldwinville, N. Y. Harness-buckle.....	Apr. 29, 1873	957	301	3	476
143, 721	Selleck, T., Greenwich, Conn. Protecting surfaces of articles of iron..... (Extension.)	July 5, 1873			4	7
144, 362	Selleg, D. N., Newburgh, N. Y. Folding-chair.....	Oct. 14, 1873	304	100	4	413
	Same..... Spring-cushion, mattress, &c.....	Nov. 4, 1873	159	52	4	491
	Sellers, C. (See Sellers, W. & C.)					
	Sellers, G. H. (See Sellers, W. & G. H.)					
	Sellers, S. (See Beschke, W., assignor.)					
	Sellers, S. (See Manly & Sellers.)					
138, 049	Sellers, S., and M. M. Manly, Philadelphia, Pa. Baluster for iron-bridge railings.....	Apr. 22, 1873	719	{ 226 } 227	3	449
5, 373	Sellers, W., Philadelphia, Pa. Turn-table for railways..... (Reissue)	Apr. 22, 1873	883	279	3	462
135, 851	Sellers, W., New York, N. Y. Toy velocipede.....	Feb. 11, 1873	428	139	3	173
136, 100	Sellers, W., Philadelphia, Pa. Riveting-machine.....	Feb. 18, 1873	651	213	3	204
136, 101	Same..... Machine for forming cutters for cutting the teeth of wheels.....	Feb. 18, 1873	652	{ 213 } 214	3	204
136, 389	Same..... Iron bridge.....	Mar. 4, 1873	33	12	3	248
139, 482	Same..... Wheel-quarterming machine.....	June 3, 1873	35	11	3	611
141, 173	Same..... Self-adjusting injector for feeding boilers.....	July 22, 1873	767	252	4	99
143, 787	Sellers, W., Haverhill, Mass. Lawn-mower.....	Oct. 21, 1873	379	126	4	429
145, 129	Sellers, W., Philadelphia, Pa., and G. H. Sellers, Wilmington, Del. Rolling-mill.....	Dec. 2, 1873	85	28	4	592
144, 416	Same..... Rotary puddler.....	Nov. 11, 1873	213	72	4	507
145, 908	Sellers, W., Haverhill, Mass. Belt-tightener.....	Dec. 23, 1873	789	258	4	685
141, 174	Sellers, W. and C., Philadelphia, Pa. Injector for feeding boilers.....	July 22, 1873	769	252	4	99
145, 597	Sellig, D. N., Newburgh, N. Y. Spring mattress.....	Dec. 16, 1873	508	167	4	650
141, 389	Selling, L., Detroit, Mich. Fruit-crate.....	July 29, 1873	989	321	4	124
140, 650	Sellman, C., New York, N. Y. Sky-light bar.....	July 8, 1873	278	94	4	42
134, 937	Seltzer, J. G., and A. J. Fink, Reading, Pa. Refrigerator.....	Jan. 14, 1873	406	130	3	53
136, 102	Selwyn, J. H., London, England. Treating ores of silver.....	Feb. 18, 1873	654		3	204
145, 020	Semmendinger, A., Fort Lee, N. J. Photographic-plate holder.....	Nov. 25, 1873	738	249	4	572
142, 739	Semple, J., Chicago, Ill. Stench-trap.....	Sept. 9, 1873	372	125	4	284
143, 384	Same..... Manufacture of plaster-patterns.....	Sept. 30, 1873	936	317	4	367
6, 549	Semple, W. G., assignor to Galway, Semple & Co., Cincinnati, Ohio. Cook-stove. (Design)	Apr. 1, 1873			3	355
135, 247	Senderling, M. L., Jersey City, N. J. Truck.....	Jan. 28, 1873	713	228	3	104
142, 126	Senieur, F., Mount Sterling, Ky. Fishing-rod holder.....	Aug. 26, 1873	676	222	4	217
142, 873	Senior, W. F., Ripley, Ohio. Car-coupling.....	Sept. 16, 1873	492	168	4	304
139, 825	Senk, W., Syracuse, N. Y. Sash-holder.....	June 10, 1873	361	112	3	653
137, 491	Senn, J. T., assignor of one-half interest to S. Schwarz, Troy, Ala. Explosive shell.....	Apr. 1, 1873	196	60	3	373
139, 923	Senour, F., Newport, assignor of one-half interest to J. A. Simpson, Covington, Ky. Re- flector.....	June 17, 1873	456	142	3	668
	Serene, J. H. (See York, J. S., assignor.)					
140, 596	Sergeant, H. C., New York, N. Y. Rock-drill.....	July 8, 1873	232	78, 79	4	39
143, 261	Same..... Valve-movement for reciprocating-engines.....	Sept. 30, 1873	825	283	4	358
143, 788	Serrell, E. W., and E. W., jr., New York, N. Y. Chain suspension-bridge.....	Oct. 21, 1873	380	126	4	429
142, 740	Serrell, J. E., New York, N. Y. Derrick.....	Sept. 9, 1873	372	125	4	284
	Severance, A. J. (See Severance, O., assignor.)					
	Severance, E. B. (See Hubbard & Severance.)					
144, 798	Severance, O., assignor to A. J. Severance, Middlebury, Vt. Stock-car.....	Nov. 18, 1873	543	185	4	545
142, 588	Sevey, H. B., Vienna, Me. Compound metal-working machine.....	Sept. 9, 1873	245	81	4	273
143, 722	Same..... same.....	Oct. 14, 1873	304	100	4	413
144, 871	Same..... Sap spout.....	Nov. 25, 1873	619	210	4	562
	Sevey, J. A. (See Taggart, J., assignor.)					
	Same..... (See Warner, D., assignor.)					
5, 632	Seward, L. A., San Francisco, Cal. Apparatus for teaching music..... (Reissue)	Oct. 28, 1873	741	247	4	469
137, 727	Seward, M. D., Normal, Ill. Hot-air furnace.....	Apr. 8, 1873	411	126	3	402
142, 128	Sewell, G., Brooklyn, assignor to W. K. Phillips, New York, N. Y. Pressure gage.....	Aug. 26, 1873	677	223	4	217
144, 706	Sexauer, L., assignor to self and J. B. Christoffel, Brooklyn, N. Y. Hemmer for sewing- machines.....	Nov. 18, 1873	465	158	4	539
	Sexton, S. B., Baltimore, Md. Stove..... (Extension)	Apr. 19, 1873			3	416
	Same..... Heating-stove..... (Extension)	Apr. 19, 1873			3	416
6, 877	Same..... Fire-place stove..... (Design)	Sept. 9, 1873			4	270
23, 716	Same..... Stove..... (Disclaimer filed)	Apr. 18, 1873			3	416
141, 821	Same..... Base-burning fire-place stove.....	Aug. 12, 1873	375	123	4	173
135, 668	Seybold, F. J., Chicago, Ill. Composition for coating iron and other metals.....	Feb. 11, 1873	266		3	160
141, 895	Same..... Car-coupling.....	Aug. 19, 1873	456	149	4	189
135, 014	Seyferth, A. H., Brunswick, Germany. Treating sugar with sulphurous acid in the vacuum-pan.....	Jan. 21, 1873	487	157	3	74
	Seymour, H. I., chair manufactory. (See Harwood & Wood, assignors)..... (Design)					
6, 458	Seymour, E., and C. E. Shattuck, Clinton, Iowa. Chair frame..... (Design)	Feb. 25, 1873			3	218
134, 938	Seymour, F. J., Wolcottville, Conn. Machine for making brass kettles and other hollow- ware.....	Jan. 14, 1873	407	130	3	53
134, 939	Same..... Spinning articles of sheet-metal.....	Jan. 14, 1873	408	130	3	53
139, 427	Seymour, F. J., assignor to Turner, Seymour, and Judds, Wolcottville, Conn. Twine cutter	May 27, 1873	888	286	3	600
137, 151	Seymour, G., Boone, Iowa. Washing-machine.....	Mar. 25, 1873	724	241	3	333
7, 046	Seymour, J., Syracuse, N. Y. Badge..... (Design)	Dec. 9, 1873			4	615
	Seymour, J. H. (See Blocher, D., assignor.)					
144, 037	Seymour, P., East Bloomfield, N. Y. Cotton-planter.....	Oct. 28, 1873	615	203	4	459
135, 731	Seymour, W. H., and D. S. Morgan, Brockport, N. Y. Harvester.....	Feb. 11, 1873	319	{ 101 } 102	3	165
	Shackell, S. (See Tisdale, C. D., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
6, 955	Shackford, C. H., and M. V. Campbell, Syracuse, N. Y. Advertising frame.....(Design)...	Oct. 7, 1873	.....	.....	4	381
142, 741	Shackleton, W. S., Cleveland, Ohio. Coal-delivering sack.....	Sept. 9, 1873	374	125	4	284
139, 738	Shaffner, T. P., Louisville, Ky. Explosive compound.....	June 10, 1873	284	.....	3	648
	Shaler, H. L. (See Shaler, R., assignor.)					
137, 964	Shaler, I. W., Brooklyn, N. Y. Gas-burner.....	Apr. 15, 1873	622	196	3	432
143, 385	Same.....Burner for carbureters.....	Sept. 30, 1873	936	317	4	367
143, 425	Same.....Signal-lantern.....	Oct. 7, 1873	27	10	4	383
143, 534	Same.....Carbureter.....	Oct. 7, 1873	118	40	4	390
138, 102	Shaler, J. B., Brooklyn, N. Y. Blacking-box cover.....	Apr. 22, 1873	762	242	3	453
139, 924	Shaler, R., assignor to H. L. Shaler, Madison, Conn. Exercising-machine.....	June 17, 1873	456	142	3	668
6, 891	Shales, D., and N. McCully, Boston, Mass. Parlor furniture.....(Design).....	Sept. 23, 1873	.....	.....	4	322
	Shalters, M. R. (See Ray & Shalters).....(Extension.)					
	Shambo, J. B. (See Lessor & Shambo.)					
	Shangle, J. R. (See Brown & Shangle.)					
134, 709	Shankland, J. W., Summertfield, Ohio. Lifting-jack.....	Jan. 7, 1873	197	64	3	22
138, 535	Shannon, J., Cohoes, N. Y. Car-brake.....	May 6, 1873	60	20	3	502
140, 222	Shannon, S., Shellsburg, Iowa. Wind-mill.....	June 24, 1873	728	229	3	699
138, 050	Shanton, E. D., and S. Shaver, Minneapolis, Minn. Device for cooling mill-stones.....	Apr. 22, 1873	720	228	3	449
	Shantz, E. S., et al. (See Smith & Brown, assignors).....(Design.)					
6, 693	Sharkey, J., Brooklyn, N. Y. Monument.....	May 27, 1873	.....	.....	3	586
6, 765	Same.....Cemetery fence and gate.....(Design).....	July 8, 1873	.....	.....	4	36
137, 247	Sharp, A. B., Labadieville, La. Revolving rake.....	Mar. 25, 1873	816	268	3	340
	Sharp, D. (See Shaw, W. F., assignor.)					
5, 349	Sharp, G. D., New York, N. Y. Billiard-table cushion.....(Reissue).....	Apr. 8, 1873	439	136	3	404
145, 368	Sharp, G. N., La Plata, Mo. Latch for gates, &c.....	Dec. 9, 1873	295	99	4	621
139, 269	Sharp, H. A., Harlem, Mo. Corn-planter.....	May 27, 1873	749	237	3	589
136, 774	Sharp, J. H., Doylestown, Pa. Feed-roller for straw-cutters.....	Mar. 11, 1873	378	125	3	285
141, 518	Sharp, R., Pittsburgh, Pa. Composition filling for painters.....	Aug. 5, 1873	95	.....	4	143
143, 386	Sharp, W., Portland, Me. Preparing and preserving fish.....	Sept. 30, 1873	937	.....	4	367
138, 536	Sharp, W. A., and C. L. McClung, Tama City, Iowa. Harvester-attachment for dumping and shocking sheaves.....	May 6, 1873	61	21	3	502
140, 734	Sharpe, J., Paterson, N. J. Mold for clay and cement pipes.....	July 8, 1873	346	117	4	48
	Sharpe, J. M., et al. (See Walker, J. A., assignor.)					
	Sharps, C., Vernon Depot, Conn. Many-barreled fire-arm.....(Extension).....	Jan. 25, 1873	.....	.....	3	70
137, 625	Sharps, C., Philadelphia, Pa. Breech-loading fire-arm.....	Apr. 8, 1873	315	98	3	394
138, 204	Sharts, T., New York, N. Y. Vault-cover.....	Apr. 22, 1873	851	269	3	460
	Shartzler, D. H. (See Shartzler & Cohic.)					
134, 940	Shattuck, C. E. (See Seymour & Shattuck).....(Design.)					
135, 669	Shaudelle, J., Huntsville, Ala. Piano-forte action.....	Jan. 14, 1873	409	131	3	53
	Shaver, G., Freeport, Ill. Wind-mill.....	Feb. 11, 1873	267	84	3	160
	Shaver, S. (See Shanton & Shaver.)					
134, 820	Shaw, A. B., Bedford, Mass. Treadle for sewing-machines.....	Jan. 14, 1873	306	98	3	45
141, 729	Shaw, A. B., Bedford, Mass., assignor to M. W. Carr, Somerville, and H. W. Brooks, Cambridge, Mass. Buckle.....	Aug. 12, 1873	290	95	4	166
135, 373	Shaw, B. F., Cambridge, Mass. Purifying and deodorizing tallow obtained in rendering offal.....	Jan. 28, 1873	821	.....	3	113
145, 454	Same.....Manufacture of glue.....	Dec. 9, 1873	368	.....	4	627
139, 925	Shaw, E. F., Boston, Mass. Support for wash-tubs.....	June 17, 1873	457	143	3	669
143, 469	Shaw, G. F., West Roxbury, Mass. Support for wash-tubs.....	Oct. 7, 1873	59	21	4	385
138, 051	Shaw, G. H., Phelps, N. Y. Fire-escape.....	Apr. 22, 1873	721	228	3	449
	Shaw, G. W. (See Wardwell, S. W., jr., assignor.)					
141, 896	Shaw, H. F., West Roxbury, Mass. Apparatus for closing doors.....	Aug. 19, 1873	457	149	4	189
142, 047	Same.....Steering apparatus.....	Aug. 19, 1873	591	194	4	200
	Shaw, J., jr. (See Barney, C. H., assignor.)					
	Same.....(See Mooney, G., assignor.)					
134, 567	Shaw, J., Ballard Vale, Mass. Self-acting spinning-jack.....	Jan. 7, 1873	61	18, 19	3	12
135, 852	Same.....Winding mechanism for spinning-jacks.....	Feb. 11, 1873	428	139	3	173
135, 248	Shaw, J., Shelby, Ohio. Attaching hair-springs to watch-balances.....	Jan. 28, 1873	714	228	3	105
137, 388	Shaw, J. L., Grand Rapids, Mich. Railway water-tank.....	Apr. 1, 1873	97	32	3	365
143, 723	Shaw, L. M., and A. S. Baker, Evansville, Wis. Rotary steam-engine.....	Oct. 14, 1873	305	100	4	413
139, 428	Shaw, M., Lawrence, Kans. Refrigerator.....	May 27, 1873	888	286	3	600
	Shaw, R. (See Bowden & Shaw.)					
141, 175	Shaw, S. J., Marlborough, Mass. Inhaler.....	July 22, 1873	773	252	4	99
135, 941	Shaw, T., Philadelphia, Pa. Planing-machine.....	Feb. 18, 1873	515	168	3	194
137, 248	Shaw, T., assignor to Gorham Manufacturing Company, Providence, R. I. Table-caster.....	Mar. 25, 1873	818	268	3	340
137, 325	Shaw, T., Philadelphia, Pa. Means for detaching boats.....	Apr. 1, 1873	46	14	3	360
140, 597	Same.....Compound-blower.....	July 8, 1873	234	79	4	39
132, 944	Shaw, W., Brooklyn, N. Y. Sash-cord guide.....	May 13, 1873	427	134	3	543
140, 436	Shaw, W., Hollister, Cal. Type.....	July 1, 1873	78	27	4	14
	Shaw, W. A., et al. (See Hook, A. H., assignor.)					
139, 739	Shaw, W. A., and C. C. Tracy, assignors to selves and C. F. Heryé, New York, N. Y. Waste-traps.....	June 10, 1873	287	88	3	648
142, 589	Shaw, W. F., assignor to self and D. Sharp, Boston, Mass. Heater for steam fire-engines.....	Sept. 9, 1873	247	81	4	274
	Shaw, W. H. (See Hofstatter & Shaw.)					
136, 465	Shawk, G. W., and A. Storer, Cleveland, Ohio. Electro-magnetic annunciator.....	Mar. 4, 1873	97	33	3	253
139, 826	Shawk, G. W., assignor of three-fourths interest to C. F. Uhl, A. Storer, and J. Gribben, Cleveland, Ohio. Electric annunciator.....	June 10, 1873	362	112	3	654
138, 537	Sheaffer, A. B., New Holland, Pa. Seat for vehicles.....	May 6, 1873	62	21	3	502
135, 291	Shearer, P. A., Morristown, Tenn. Hay and cotton press.....	Jan. 28, 1873	745	240	3	107
139, 087	Shedlock, A., New York, N. Y. Adjustable reamer.....	May 20, 1873	566	178	3	567
140, 955	Sheears, T. J., assignor of one-half interest to B. F. Potter, Ypsilanti, Mich. Bed-bottom.....	July 15, 1873	552	185	4	72
144, 799	Sheears, T. J., Ypsilanti, Mich. Stilt.....	Nov. 18, 1873	544	185	4	545
135, 942	Sheer, J., Lincoln, Ill. Corn planter.....	Feb. 18, 1873	516	168	3	194
135, 047	Sheffield, G. V., Boston, Mass. Sewing-machine for boots and shoes.....	Jan. 21, 1873	517	{ 167 } { 168 }	{ 3 } { 3 }	77
137, 033	Same.....Machine for making double-tapered thread.....	Mar. 18, 1873	610	202	3	313
140, 651	Sheffler, J., Deselm, Ill. Washing-machine.....	July 8, 1873	279	94	4	42
139, 827	Shelby, C. C., Spring Valley, N. Y. Railway-switch.....	June 10, 1873	362	112	3	654
	Shelbyville Manufacturing Company. (See Simpson & Ellacott, assignors.)					
	Sheldon & Co. (See Phillips, H. F., assignor.)					
137, 249	Sheldon, C. B., New York, N. Y. Furniture-caster.....	Mar. 25, 1873	818	268	3	340
137, 250	Same.....same.....	Mar. 25, 1873	819	269	3	340
137, 251	Same.....same.....	Mar. 25, 1873	820	269	3	340
137, 728	Same.....same.....	Apr. 8, 1873	412	126	3	402
139, 619	Same.....same.....	June 3, 1873	151	50	3	621

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140, 310	Sheldon, C. B., New York, N. Y. Wheel for furniture-casters	June 24, 1873	804	255	3	706
140, 311	Same..... same	June 24, 1873	804	255	3	706
141, 390	Same..... Table-caster	July 29, 1873	989	321	4	124
141, 391	Same..... Stool	July 29, 1873	990	321	4	124
145, 909	Same..... Knife-cleaner	Dec. 23, 1873	789	259	4	685
138, 766	Sheldon, C. H. (See Clogston, L. B., assignor)..... (Reissue.)	May 13, 1873	277	86	3	530
140, 795	Sheldon, G. G., Chicago, Ill. Gas-fixture	July 15, 1873	404	137	4	60
143, 535	Sheldon, J. (See Bradley, E. F., assignor)	Oct. 7, 1873	118	40	4	390
137, 389	Sheldon, N. P., assignor to H. H. Welch, San Francisco, Cal. Pump-plunger and pump	Apr. 1, 1873	98	32	3	365
136, 622	Sheldon, R. B., Canastota, N. Y. Horse hay-rake	Mar. 11, 1873	257	86	3	275
143, 594	Shellenback, P., and F. Brilmayer, Hamilton, Ohio. Rotary balanced cut-off valve	Oct. 14, 1873	181	61	4	404
144, 292	Shelly, T. B., Chicago, Ill. Shoemakers' pinchers	Nov. 4, 1873	100	33, 34	4	486
5, 530	Shelmandine, C., Jefferson, N. Y. Machine for riving shingles	Aug. 12, 1873	398	130	4	175
138, 205	Shelton, G., Normal, Ill. Plow..... (Reissue.)	Apr. 22, 1873	851	270	3	460
136, 339	Same..... Suspender for fly-guards upon horses	Feb. 25, 1873	874	282	3	233
140, 652	Shelton, N. K., Wabash, Ind. Carpet-stretcher	July 8, 1873	279	94	4	42
144, 929	Shenfield, A., New York, N. Y. Suspenders	Nov. 25, 1873	662	224	4	566
134, 773	Shenston, T. S., Brantford, Canada. Inkstand	Jan. 14, 1873	260	85	3	41
7, 075	Shenton, F., Slatington, assignor to Locke Slate Company, Philadelphia, Pa. Slate-dressing machine	Dec. 23, 1873			4	671
143, 851	Shepard, A., Southington, Conn. Drawer-pull..... (Design.)	Oct. 21, 1873	437	145	4	434
140, 598	Shepard & Dudley. (See Nimmo, E. B., assignor.)	July 8, 1873	235	79	4	39
140, 735	Shepard, C. J., Brooklyn, N. Y. Hot-air furnace	July 8, 1873	347		4	48
5, 280	Shepard, G. L., assignor of one-half interest to C. C. Geller, Albany, N. Y. Child's carriage	Feb. 11, 1873	453	147	3	175
135, 853	Shepard, H. E., New Haven, assignor to Bradley & Hubbard, West Meriden, Conn. Plastic composition for the manufacture of knobs and other molded articles	Feb. 11, 1873	429	139	3	173
135, 854	Shepard, H. W., New York, N. Y. Handle for milk-cans..... (Reissue.)	Feb. 11, 1873	430	140	3	173
135, 855	Same..... Cotton or woolen can	Feb. 11, 1873	431	140	3	173
145, 534	Same..... same	Dec. 16, 1873	459	150	4	646
139, 088	Same..... Sheet-metal vessel	May 20, 1873	567	178	3	567
140, 389	Shepard, H. W., Madison, Ind., assignor of one-third interest to G. W. Cable, Saint Louis, Mo. Safety-valve for steam-boilers	July 1, 1873	46	15	4	12
138, 767	Shepard, J., New Britain, Conn. Manufacture of umbrella-stretchers	May 13, 1873	279	87	3	530
141, 671	Shepard, O. F., Cincinnati, Ohio. Device for attaching hubs to axles	Aug. 12, 1873	245	78	4	163
140, 312	Shepard, S. A., Pittsburgh, Pa. Apparatus for painting or coating broom-handles, moldings, &c	June 24, 1873	805	255	3	706
137, 965	Shepardson, H. S., Shelburne, Mass. Gimlet-handle	Apr. 15, 1873	622	196	3	432
143, 100	Shephard, J. A., Portsmouth, Ohio. Pitman-connection..... (Reissue.)	Sept. 23, 1873	687	236	4	330
143, 536	Shephard, O. P. (See Howard, O. B., assignor)	Oct. 7, 1873	119	40	4	390
144, 363	Sheplar, D. (See Sheplar, N. and D.)	Nov. 4, 1873	159	53	4	491
142, 742	Sheplar, N. and D., Murrayville, Ill. Wind-wheel	Sept. 9, 1873	375	126	4	284
142, 416	Sheppard, J. W., New York, N. Y. Game-register for cards	Sept. 2, 1873	82	27	4	249
144, 150	Sherck, I., Fremont, Ohio. Turbine water-wheel	Oct. 28, 1873	707	235	4	466
138, 348	Sherer, C. W., Chicago, Ill. Washing-machine	Apr. 29, 1873	1,006	317	3	480
144, 872	Sheridan, J. J., New York, N. Y. Boring and drilling machine	Nov. 25, 1873	619	210	4	562
139, 926	Sherman, D. H., Jersey City, N. J. Apparatus for depilating animal carcasses	June 17, 1873	458	143	3	669
136, 103	Sherman, E. G., Forestville, N. Y. Spring bed-bottom	Feb. 18, 1873	655	214	3	204
134, 615	Sherman, H. E. (See Burress, H. W., assignor.)	Jan. 7, 1873	107	35	3	15
142, 287	Sherman, H. N., Beloit, Wis. Breech-loading fire-arm	Aug. 26, 1873	807	267	4	227
135, 943	Sherman, J. A., New York, N. Y. Truss					
138, 701	Sherman, W. B., Clinton, N. Y. Measuring-can for oil, &c					
138, 702	Shermann, J. A. (See Rowe, J. L., assignor.)					
138, 703	Sherrard, S. (See Hyman, J., assignor.)					
142, 048	Sherrill, J., Harrisburgh, Oreg. Cultivator	Feb. 18, 1873	517	169	3	194
144, 707	Sherwood, A., Auburn, N. Y. Alarm-bell attachment	May 6, 1873	63	21	3	502
138, 349	Sherwood, D., et al. (See Dudley, G. D., assignor.)	Apr. 15, 1873	540	168	3	425
141, 597	Sherwood, D. (See Woods & Sherwood)..... (Reissue.)	Mar. 11, 1873	379	125	3	285
142, 874	Sherwood, D., assignor to E. P. Woods, D. Sherwood, and C. H. Latham, Lowell, Mass. Wire-basket	Dec. 30, 1873	868	281	4	702
141, 392	Same..... Toilet-stand					
134, 941	Sherwood, J. B., Chicago, Ill. School desk and seat	Mar. 25, 1873	820	269	3	340
135, 602	Sherwood, J. H., New York, N. Y. Grate fire-place and hot-air furnace	Oct. 7, 1873	60	21	4	385
142, 417	Shewell, J. D., Boston, Mass. Fastening for meeting-rails of sashes					
137, 252	Shields, W. C. (See Leet & Shields.)					
143, 470	Shinn, J., assignor of one-half interest to J. and J. Dobson, Philadelphia, Pa. Power-loom					
138, 701	Shinn, R. A., Georgetown, D. C. Machine for clearing streets of snow					
138, 702	Shipherd, J. J., et al. (See Shipherd & Curtis, assignors.)					
138, 703	Same..... (See Shipherd, W. C., assignor.)					
142, 048	Same..... (See Shipherd & Curtis, assignors.)					
144, 707	Same..... (See Shipherd, W. C., assignor.)					
138, 349	Shipherd, W. C., assignor of three-fourths interest to S. S. Coe, J. J. and J. R. Shipherd, Cleveland, Ohio. Coupling for whiffle-trees	May 6, 1873	207	65	3	514
141, 597	Shipherd, W. C., and E. P. Curtis, assignors of three-fifths interest to S. S. Coe, J. J. and J. R. Shipherd, Cleveland, Ohio. Thill-coupling	May 6, 1873	207	65	3	514
142, 874	Shipman, A. H., Albany, N. Y. Planing-machine	May 6, 1873	208	66	3	514
141, 392	Shipman, A. H., Arcadia, N. Y. Cutter-head	Aug. 19, 1873	592	195	4	200
134, 941	Shipp, W. T., C. J. Peterson, and R. L. McLurd, Brevard Station, N. C. Plow	Nov. 18, 1873	466	158	4	539
135, 602	Shippen, E. W. (See Minnies, T. S., assignor.)					
142, 874	Shippey, J. F., Valley Falls, N. Y. Tempering harvester-knives	Apr. 29, 1873	1,007	317	3	480
141, 392	Shireman, J. H., York, Pa., assignor of one-half interest to A. R. Reese, Phillipsburgh, N. J. Harvester	Aug. 5, 1873	161	52	4	148
134, 941	Shirrell, J., Paterson, N. J. Machine for grinding cylinder-heads	Sept. 16, 1873	493	168	4	304
135, 602	Shive, S., Forks, and D. Savage, Orangeville, Pa., said Savage assignor of one-third interest to said Shive. Machine for dressing millstones	July 29, 1873	990	321	4	124
142, 417	Shiveley, C. W., Peru, Ind. Bleaching-safe	Jan. 14, 1873	409	131	3	53
137, 252	Shiveley, T., assignor of one-half interest to B. E. Hart, Lansing, Mich. Grain-scourer		200	61, 62		
143, 470	Shoales, W. E., Sherburne Four Corners, N. Y. Harvester-cutter	Sept. 2, 1873	84	28	4	249
143, 470	Shoe Machinery Manufacturing Company. (See Bean, E. E., assignor)..... (Reissue.)					
143, 470	Same..... (See Cummings, P. D., assignor.)					
143, 470	Same..... (See Dodge, J. W., assignor.)					
143, 470	Same..... (See Hawkins, G. C., assignor.)					
143, 470	Same..... (See Howe, J., assignor.)					

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	Shoe-Machinery Manufacturing Company. (See Keniston, C., assignor.)					
	Same..... (See Lambart, R. C., assignor.)					
	Same..... same..... (Reissue.)					
	Same..... (See Tebbets & Nutting, assignors.)					
142, 948	Shoemaker, D., Kittaning Township, assignor of one-half interest to G. A. Reichert, jr., Manerville, and J. H. Reichert, Philadelphia, Pa. Blasting-plug.....	Sept. 16, 1873	555	188	4	310
142, 949	Same..... Bit for boring minerals.....	Sept. 16, 1873	556	188	4	310
142, 950	Same..... Coal-boring machine.....	Sept. 16, 1873	557	189	4	310
144, 637	Shoemaker, E., Melmore, Ohio. Spark arrester and conductor.....	Nov. 18, 1873	408	137	4	534
143, 595	Shoff, C. J., Osceola, Pa. Combined square, protractor, rule, bevel, plumb, and level.....	Oct. 14, 1873	182	62	4	404
	Sholes, A. W. (See Leeds, L., assignor.)					
145, 247	Sholes, C. W., and H. C. Kelly, Morrison, Ill. Pump.....	Dec. 2, 1873	187	64	4	600
	Sholes, E. W. (See Leeds, L., assignor.)					
	Shoninger, B. (See Lomas, J. R., assignor.)					
	Same..... same..... (Design.)					
144, 230	Shontz, A. S., assignor to Comstock, Castle & Co., Quincy, Ill. Stove-door.....	Nov. 4, 1873	56	17	4	482
6, 872	Shook, H. G., New York, N. Y. Can..... (Design.)	Sept. 2, 1873			4	242
143, 643	Shook, J. H., Normal, Ill. Bee-hive.....	Oct. 14, 1873	226	76	4	407
136, 340	Shorey, S. W., Boston, assignor to A. B. Keith, Braintree, Mass. Machine for forming staple-seams in leather.....	Feb. 25, 1873	875	282	3	234
137, 966	Shorey, S. W., Boston, Mass. Modes of forming turned seams.....	Apr. 15, 1873	623	197	3	332
139, 429	Same..... Seam for leather-work.....	May 27, 1873	889	286	3	600
139, 521	Short, J., New Brunswick, N. J., assignor to self and R. N. Woodworth, New York, N. Y. Thread dressing and winding machine.....	June 3, 1873	65	22	3	614
145, 910	Short, S., Cincinnati, Ohio. Clothes-mangle.....	Dec. 23, 1873	790	259	4	685
145, 911	Same..... Washing-machine.....	Dec. 23, 1873	791	259	4	685
145, 912	Same..... Drying-frame for lace-curtains, &c.....	Dec. 23, 1873	792	{ 259 } 260	{ 4 } 4	685
	Shoulders, G. H. (See Erwin & Shoulders.)					
	Shover, G. H., et al. (See Anderson, J. J., assignor.)					
141, 730	Shreiner, J. H., Wilmington, Del. Grain and seed drill.....	Aug. 12, 1873	291	95	4	167
	Shroder, J. B., et al. (See Williams, H. B., assignor.)					
	Shrote, J. H., deceased, by M. Shrote, executrix, Baltimore, Md. Cutting and panning cakes..... (Extension.)	Oct. 11, 1873			4	379
	Shrote, M., executrix. (See Shrote, J. H.)..... (Extension.)					
141, 959	Shugart, W. H., New Garden, Ind. Sawing-machine.....	Aug. 19, 1873	506	167	4	193
	Shuler, I. C., Amsterdam, N. Y. Construction of sheet-metal coffins..... (Extension.)	July 5, 1873			4	7
	Shull, A. S. (See Sayre & Shull)					
139, 027	Shultz, J. U., Shelby, Ohio. Wagon-seat.....	May 20, 1873	509	160	3	562
137, 492	Shuman, T., Corning, Iowa. Attachment for wash-boilers.....	Apr. 1, 1873	197	60	3	373
135, 249	Shumard, W., Richmond, Ind. Diamond-gauge.....	Jan. 28, 1873	714	228	3	105
137, 801	Shurz, F., Paloma, Ill. Binding-screw.....	Apr. 15, 1873	486	152	3	421
136, 776	Shute, C. S. and L. R., Springfield, Mass. Railway-switch.....	Mar. 11, 1883	380	126	3	285
	Shute, L. R. (See Shute C. S. and L. R.)					
140, 956	Shyrma, A. F., assignor of one-half interest to B. F. McCahill, New York, N. Y. Laying cement pavements.....	July 15, 1873	553	185	4	72
	Sibley, E. E. (See Callahan, C., assignor.)					
142, 875	Sibley, J., New York, N. Y. Arm-pit shield.....	Sept. 16, 1873	493	168	4	304
141, 822	Sibley, L. D., Chicago, Ill. Stereoscope.....	Aug. 12, 1873	376	123	4	173
	Sibley, W. E. (See Babbitt, S., assignor.)					
139, 976	Sichler, G., New York, N. Y. Apparatus for pitching barrels.....	June 17, 1873	493	156	3	672
138, 945	Sickles, F. E., Marshall, Tex. Sinking pneumatic piles or caissons.....	May 13, 1873	427	134	3	543
144, 570	Sickenberger, A., Chicago, Ill. Cigar-point splitter.....	Nov. 11, 1873	344	116	4	517
140, 957	Siddens, W. P., State Line City, assignor to self and R. Craig, Warren County, Ind. Car-coupling.....	July 15, 1873	554	186	4	72
143, 724	Sidney, W. E., Knightsville, Ind. Portable pump for mines.....	Oct. 14, 1873	306	101	4	413
141, 083	Siebe, H. H., W. A. Gorman, and T. Christy, jr., London, England. Camel for raising sunken vessels.....	July 22, 1873	682	229	4	92
141, 598	Siebenthal, A., assignor to self and F. R. Dufour, Vevay, Ind. Steering-apparatus for vessels.....	Aug. 5, 1873	163	52	4	148
	Siebert, L. (See Buell & Lilley, assignors.)					
	Siefert, W. C. (See Weber & Siefert.)					
141, 294	Siemens, C. W., Westminster, England. Pneumatic dispatch-apparatus.....	July 29, 1873	892	293	4	117
141, 176	Siering, F., New York, N. Y. Weather-strip.....	July 22, 1873	774	253	4	99
145, 913	Same..... Process of preparing felt for weather strips, packings, &c.....	Dec. 23, 1873	793		4	685
139, 334	Sietz, M., Williamsburg, N. Y. Beer-cask.....	May 27, 1873	800	255	3	593
139, 089	Sievers, F., assignor of one-half interest to W. H. Hilderbrann, Fort Wayne, Ind. Ruffler and gatherer for sewing-machines.....	May 20, 1873	568	178	3	567
136, 104	Silber, A. M., and F. White, London, England. Portable-lamp cooking-apparatus.....	Feb. 18, 1873	656	{ 214 } 215	{ 3 } 3	204
143, 537	Silberschmidt, S., Baltimore, Md. Ankle supporter and filler.....	Oct. 7, 1873	120	41	4	390
135, 164	Sillman, H., Brooklyn, N. Y. Band saw-gang.....	Jan. 21, 1873	610	198	3	84
138, 443	Same..... Band sawing-machine.....	Apr. 29, 1873	1,091	344	3	487
	Silsby, H. C. (See Wickes, S. W., assignor.)					
	Silver, A. R. (See Faucett, Silver & Deming, assignors.)					
141, 731	Silver, A. R., assignor of one-half interest to J. Deming, Salem, Ohio. Meat-chopper.....	Aug. 12, 1873	292	95	4	167
	Silver, E. W. (See Faucett, Silver & Deming.)					
142, 288	Silver, W. J., Salt Lake City, Utah. Shaft-coupling.....	Aug. 26, 1873	808	267	4	227
	Silverberg, M. (See Pink & Silverberg.)					
139, 199	Silvernale, H. J., Golden Lake, Wis. Harvester.....	May 20, 1873	672	{ 210 } 211	{ 3 } 3	575
139, 270	Silvers, J. H., Hightstown, N. J. Tag-machine.....	May 27, 1873	750	238	3	589
144, 571	Silversmith, J., Chicago, Ill. Manufacture of printing-type.....	Nov. 11, 1873	345	{ 116 } 117	{ 4 } 4	517
	Silverthorn, N., Summerville, Canada. Boot and shoe tip..... (Extension.)	Nov. 29, 1873			4	558
	Silverwood, W. (See Wilders, J. M., assignor.)					
	Simendinger, T. (See Schottky & Simendinger.)					
136, 623	Simes, W. F., Philadelphia, Pa. Preparing camphor.....	Mar. 11, 1873	257		3	275
	Simmerman, J. S. (See Newlin & Simmerman.)					
141, 599	Simmons, A. J., Indianapolis, Ind. Valve for steam and vacuum pumps.....	Aug. 5, 1873	163	52	4	148
143, 725	Same..... Steam and vacuum pump.....	Oct. 14, 1873	307	101	4	413
142, 951	Simmons, C. E., Monroe, Wis. Ice-cream freezer.....	Sept. 16, 1873	559	189	4	310
142, 952	Simmons, C. J., Kansas City, Mo. Egg-carrier.....	Sept. 16, 1873	560	190	4	310
138, 444	Simmons, F., New Orleans, La. Friction-gear.....	Apr. 29, 1873	1,092	345	3	487
136, 553	Simmons, G. H., Bennington, Vt. Lamp.....	Mar. 4, 1873	182	59	3	260

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
	Simmons, G. W., <i>et al.</i> (See Howard & Jackson, assignors) (Reissue.)					
135, 493	Simmons, H. P., Paterson, and A. J. King, Hudson, N. J. Bee-hive	Feb. 4, 1873	91	29	3	134
139, 828	Simmons, I., Baltimore, Md. Gas-burner	June 10, 1873	363	112	3	654
145, 248	Same Carbureter	Dec. 2, 1873	187	64, 65	4	600
145, 760	Simmons, J. D., Quincy, Ill. Ventilator for railway-cars	Dec. 23, 1873	663	216	4	675
141, 823	Simmons, T., assignor of one-half interest to A. & C. T. Clemen, Halifax, Canada. Vapor-burners	Aug. 12, 1873	377	123	4	173
141, 084	Simon, R., Paterson, N. J. Reel	July 22, 1873	683	229	4	92
142, 177	Simon, R., New York, N. Y. Reel for skeining silk	Aug. 26, 1873	717	237	4	220
6, 766	Simon, S., New York, N. Y. Shelf-paper	July 8, 1873			4	36
6, 767	Same same	July 8, 1873			4	36
6, 768	Same same	July 8, 1873			4	36
6, 961	Simonds, S. M., Philadelphia, Pa. Kite	Oct. 14, 1873			4	401
	Simonds, W. E. (See Burr, H. J., assignor.)					
	Same (See Jaycox, G. B., assignor.)					
	Simonin, C. F. A. (See Adamson & Simonin) (Reissue.)					
144, 000	Simonin, C. F. A., assignor to W. Adamson, Philadelphia, Pa. Extracting oleine from fatty matters	Oct. 28, 1873	585	194	4	456
140, 550	Simons, N. M., Saint Louis, Mo. Cooking-range	July 1, 1873	177	60	4	23
137, 034	Simons, W., Charleston, S. C. Lamp-shade	Mar. 18, 1873	612	202	3	313
136, 554	Simpson, A. B., Camden, Ohio. Medical compound for skin-diseases	Mar. 4, 1873	183		3	260
	Simpson, E., <i>et al.</i> (See Neil, J. W., assignor.)					
	Simpson, J. A. (See Senour, F., assignor.)					
	Simpson, J. F. (See Stark, J. P., assignor.)					
134, 568	Simpson, J. K., and S. N. Drake, New York, assignors of four-sixths interest to H. & M. Klenen, New York, N. Y., F. Klenen, Hoboken, N. J., and J. N. Thomas, Maysville, Ky. Steam vacuum-pump	Jan. 7, 1873	63	19	3	12
136, 461	Simpson, J. M., Oshkosh, Wis. Sash-balance	Mar. 4, 1873	90	31	3	253
140, 437	Simpson, M. P., Pana, and J. P. Ellacott, assignors to the Shelbyville Manufacturing Company, Shelbyville, Ill. Cultivator	July 1, 1873	78	28	4	14
140, 851	Simpson, W., Berlin, Canada. Mirror-holder	July 15, 1873	453	154	4	64
135, 670	Simpson, W., and A. Gardner, Ilford, England. Reciprocating steam-engine	Feb. 11, 1873	268	84	3	161
142, 953	Sims, E. B., Antwerp, N. Y. Door-bell	Sept. 16, 1873	561	190	4	310
5, 513	Sims, Z. B., Bonham, Tex. Cotton-plow	July 29, 1873	1,022	331	4	126
135, 165	Same Cultivator	Jan. 21, 1873	610	199	3	84
139, 620	Same Corn and cotton planter	June 3, 1873	152	51	3	621
135, 447	Sinclair, J. A., Bridgeport, assignor to self and M. C. McKeown, Barnesville, Ohio. Grate-bar	Feb. 4, 1873	52	17	3	131
144, 001	Sinclair, J. A., Bridgeport, Ohio. Fire-engine	Oct. 28, 1873	586	194	4	456
5, 387	Sinclair, J. D., assignor by mesne assignment to E. A. Lambert, W. S. Harris, and N. B. Rhodes, Brooklyn, N. Y. Hatchway	Apr. 29, 1873	1,118	353	3	489
140, 852	Sinclair, J. E., Worcester, Mass. Clamp	July 15, 1873	454	154	4	64
141, 295	Sinclair, J. P., Eldridge, N. Y. Chair-seat	July 29, 1873	894	293	4	117
	Sinclair, R. R. (See Reese, G. F. C., assignor.)					
136, 675	Siner, J. B., assignor to P. C. Kirk and M. Pendergrast, Lawrence, Mass. Converting rotary motion of a shaft into reciprocating motion	Mar. 11, 1873	300	99	3	278
141, 600	Sink, J. J., Philadelphia, Pa. Combined fountain and pump	Aug. 5, 1873	164	53	4	148
144, 708	Sipe, L., assignor of one-half interest to G. R. Eastham, Keezletown, Va. Corn-planter	Nov. 18, 1873	467	158	4	539
	Siskind, I. J. (See Hamburger, Siskind & Klein.)					
140, 223	Sisson, G. B., Buffalo, N. Y. Fastening for safety-valve cases	June 24, 1873	729	229	3	699
141, 467	Same Frame for vertical engines	Aug. 5, 1873	52	16	4	139
145, 535	Sisson, J. E., Bastrop, La. Cultivator	Dec. 16, 1873	460	150	4	646
145, 130	Sitzler, C. A., Kitzinger, Germany. Paint-compound	Dec. 2, 1873	89		4	592
137, 253	Skaats, G. W., Cincinnati, Ohio. Railway-rail joint	Mar. 25, 1873	821	270	3	340
143, 035	Skaats, W. W., assignor to J. D. Henry, Cincinnati, Ohio. Bed-bottom	Sept. 23, 1873	635	217	4	326
140, 653	Skelton, W. M., Greencastle, Ind. Apparatus for making vinegar and ageing spirits	July 8, 1873	280	95	4	42
142, 954	Skidmore, W. H., assignor of one-half interest to C. A. Ellis, Philadelphia, Pa. Railway-rail joint	Sept. 16, 1873	561	190	4	310
	Skilton, C. C. (See Palmer, H. L., assignor.)					
	Same same					
135, 015	Skinner, A. W., Providence, R. I. Condensing-tube for carding-machines, &c.	Jan. 21, 1873	490	157	3	74
	Skinner, C. (See Doherty, M., assignor.)					
	Skinner, D. S., <i>et al.</i> (See Ralston, J., assignor.)					
145, 536	Skinner, D. S., Providence, R. I. Cotton-bale tie	Dec. 16, 1873	461	150	4	646
146, 101	Skinner, H., Yonkers, N. Y. Loom for weaving piled fabrics	Dec. 30, 1873	979	{ 316 317 }	{ 4 4 }	{ 711 706 }
146, 028	Skinner, H. A., Worcester, Mass. Shutter-fastening	Dec. 30, 1873	914	296	4	706
139, 271	Skinner, H. J., and S. J. Gifford, Dunkirk, N. Y. Railway-frog	May 27, 1873	752	238	3	589
140, 551	Skinner, H. M., assignor to C. C. Briggs and A. I. Enoch, Rockford, Ill. Wheel-plow	July 1, 1873	178	60, 61	4	23
144, 482	Skinner, J., Stockwell, Ind. Wood-sawing machine	Nov. 11, 1873	270	91	4	512
141, 601	Skinner, J. L., Amboy, Ill. Damper and ventilator	Aug. 5, 1873	165	53	4	148
	Skinner, J. S. (See Marston & Skinner.)					
139, 335	Skinner, W. A., and J. E. Goodson, Callao, Mo. Compound for treating iron, steel, &c.	May 27, 1873	800		3	593
145, 021	Skoiner, H., London, assignor to W. S. Mappin, Stanley Crescent, England. Manufac- ture of gas	Nov. 25, 1873	739	{ 249 250 }	{ 4 4 }	{ 572 572 }
143, 726	Slack, J., Brooklyn, N. Y. Needle and shuttle threader, and knife	Oct. 14, 1873	308	101	4	413
	Slafter, O. A. (See Covey & Slafter.)					
141, 519	Slaight, T., Newark, N. J. Seal-lock	Aug. 5, 1873	96	29	4	143
139, 621	Slater, J., Sandy Lake, Pa. Sled-brake	June 3, 1873	153	51	3	621
135, 733	Slater, J. A., New Haven, Conn. Apparatus for treating offal	Feb. 11, 1873	321	103	3	165
	Slater, M. (See Parker, G. E., assignor.)					
142, 355	Slater, O. L., Wall Hill, Miss. Cotton-planter	Sept. 2, 1873	29	11	4	244
143, 852	Slauson, T. D., Havana, N. Y. Stove-pipe thimble	Oct. 21, 1873	438	146	4	434
	Slawson, J. B. (See Smith, R. D. O., assignor.)					
	Same (See Winchell, J. F., assignor.)					
	Same (See Wood, A. W., assignor.)					
144, 800	Slayton, E. M., Conquest, N. Y. Paper vessel	Nov. 18, 1873	544	185	4	545
6, 985	Sleeper, N., assignor to Sleeper, Wells & Aldrich, Burlington, N. J. Bottle (Design)	Nov. 4, 1873			4	478
	Sleeper, Wells & Aldrich. (See Sleeper, N., assignor) (Design.)					
138, 445	Slensby, W. P., New York, N. Y. Thimble	Apr. 29, 1873	1,092	345	3	487
	Slicer, C. H., administrator. (See Slicer, W.)					
140, 024	Slicer, W., deceased, by C. H. Slicer, administrator, Baltimore, Md. Railway-car spring	June 17, 1873	592	187	3	680
142, 129	Slichter, J. C., Chicago, Ill. Car-roof	Aug. 26, 1873	678	223	4	217
142, 130	Same Fire-proof roofing-cement	Aug. 26, 1873	679		4	217

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 930	Slingerland, W. A., New York, N. Y. Railway-switch	Nov. 25, 1873	662	225	4	566
	Sloan, C. M. (See Grow & Sloan.)					
144, 873	Sloan, D. S., assignor to J. H. and L. S. Lewis, and A. D. West, Rockville, Conn. Whistle-tree	Nov. 25, 1873	620	211	4	562
	Sloan, G. B. (See Bailey, W., assignor.)					
	Sloan, J. O., et al. (See Forden, J. M., assignor.)					
	Same..... (See Gross, E. L., assignor.)					
142, 356	Sloan, T. J., Tuckahoe, N. Y. Ratchet-drill	Sept. 2, 1873	30	11	4	244
135, 166	Sloan, W. B., Hamburg, Iowa. Blind-slat adjuster	Jan. 21, 1873	611	199	4	84
	Sloan, W. J. (See Antill & Sloan.)					
	Sloane, W. & J. (See Carlton, R., assignor.)					
	(Design.)					
	Slocum, E. (See Benseman & Slocum.)					
141, 085	Slocumb, J. L., Raymond, Miss. Cotton-seed planter	July 22, 1873	684	229	4	92
143, 426	Sloper, B., New York, N. Y. Portable gas-machine	Oct. 7, 1873	28	10	4	383
6, 609	Slusser, B. H., and L. Pearson, South Bend, Ind. Picture-frame	Apr. 22, 1873			3	445
	(Design.)					
145, 690	Slusser, G., assignor of one-half interest to C. S. Bell and J. H. Anderson, Hillsborough, Ohio. Cultivator	Dec. 16, 1873	587	192	4	657
135, 374	Sluthour, A., New Philadelphia, Ohio. Wash-boiler	Jan. 28, 1873	823	265	3	114
135, 250	Smale, G. J., Chicago, Ill. Tilting machine	Jan. 28, 1873	714	228	3	105
	Small, C. O. (See Smiley & Small.)					
	Small, J. H. (See Allison & Homelius, assignors.)					
	Smalley, N. F. (See Tice & Smalley.)					
141, 240	Smiley, F., Batavia, N. Y. Treadle for sewing-machines	July 29, 1873	845	275	4	112
135, 856	Smiley, J., Franklin, Pa. Wrench	Feb. 11, 1873	431	140	3	173
	Smiley, J. B. (See Ranger & Smiley.)					
139, 028	Smiley, O. S., and C. O. Small, said Small assignor to said Smiley, Augusta, Me. Lathe for turning wood	May 20, 1873	509	161	3	562
141, 602	Smillie, R., and C. H. Brooks, Virden, Ill. End-gate for wagons	Aug. 5, 1873	166	53	4	148
142, 357	Smith, A., Niagara Falls, N. Y. Apparatus for burning gas-tar	Sept. 2, 1873	31	11, 12	4	245
142, 655	Smith, A., Providence Township, Pa. Combined shovel, plow, and cultivator	Sept. 9, 1873	300	98	4	278
142, 743	Smith, A., Cincinnati, Ohio. Drying lard and tallow	Sept. 9, 1873	375		4	284
142, 744	Same..... Apparatus for drying and cooling tallow or lard	Sept. 9, 1873	376	126	4	284
145, 818	Smith, A., Perrysburgh, Ohio. Machine for driving nails	Dec. 23, 1873	707	232	4	679
	Smith, A. A., et al. (See Taylor, T. A., assignor.)					
136, 777	Smith, A. B., Chambersburgh, Pa., and S. Osborn, Trenton, N. J. Saw-set	Mar. 11, 1873	382	126	3	285
138, 539	Smith, A. B., Denison, Tex. Excavator	May 6, 1873	63	21	3	503
139, 430	Smith, A. B., Memphis, Mich. Hasp-lock	May 27, 1873	889	286	3	600
139, 522	Smith, A. B., Geneva, N. Y. Boiler-furnace	June 3, 1873	66	23	3	614
5, 547	Smith, A. C., Fayetteville, N. C. Cultivator	Aug. 19, 1873	625	206	4	203
145, 691	Same..... same	Dec. 16, 1873	588	193	4	657
146, 102	Smith, A. C., Fort Madison, Iowa, assignor to self, D. W. Blackburn, Keokuk, Iowa, and S. H. Craig, Fort Madison, Iowa. Nut-lock	Dec. 30, 1873	983	317	4	711
134, 942	Smith, A. D., Cincinnati, Ohio. Corn-planter	Jan. 14, 1873	410	131	3	53
142, 127	Smith, A. D., Grafton, Ohio. Rein-guide for vehicles	Aug. 26, 1873	676	222	4	217
	Smith, A. E. (See Warner, B. W., assignor.)					
143, 262	Smith, A. F., Montrose, Iowa. Corn-planter	Sept. 30, 1873	826	283	4	358
	Smith, A. H., et al. (See Davis, H. J., assignor.)					
140, 085	Smith, A. H., Brooklyn, N. Y. Stone-crusher	June 17, 1873	594	187	3	680
135, 292	Smith, A. M., Brooklyn, N. Y. Glass-press	Jan. 28, 1873	746	240	3	107
135, 375	Same..... Glass button	Jan. 28, 1873	824	266	3	114
135, 494	Smith, A. M., Chicago, Ill. Game apparatus	Feb. 4, 1873	92	29	3	135
143, 036	Smith, A. N., Chillicothe, Mo. Corn-planter	Sept. 23, 1873	636	217	4	326
146, 029	Smith, A. P., Sacramento, Cal. Ladder	Dec. 30, 1873	914	296	4	706
134, 774	Smith, A. Q., and H. M. Ogden, assignors to themselves and D. Brown, Burlington, Iowa. Steam and air brake	Jan. 14, 1873	261	85	3	41
	Smith, A. W. (See Abbott, J. D., assignor.)					
142, 590	Smith, A. W., Manchester, N. H. Horseshoe	Sept. 9, 1873	248	81	4	274
	Smith, B., administratrix. (See Smith, J. B., assignor.)					
	Smith, B. (See Smith, J. B. and H., and Bradley.)					
137, 572	Smith, B., Chicago, Ill. Making windows weather-proof	Apr. 8, 1873	274	84	3	390
137, 573	Smith, B. B., Nashville, Tenn., assignor of one-half interest to W. H. McDonald, Green Hill, Ala. Governor for steam-engine	Apr. 8, 1873	275	84	3	391
143, 727	Smith, B. F., Philadelphia, Pa. Animal-trap	Oct. 14, 1873	309	102	4	413
138, 206	Smith, B. F. & J. B. Webster, Mass. Saw-mill carriage	Apr. 22, 1873	852	270	3	460
	Smith, B. H. (See Griffing, J., assignor.)					
139, 029	Smith, B. H., Ipswich, Mass. Box-lifter	May 20, 1873	510	161	3	562
137, 493	Smith, B. M., assignor to E. S. Smith, Topeka, Kans. Smelting-furnace	Apr. 1, 1873	197	60, 61	3	373
5, 389	Smith, B. R., and J. C. Harris, Philadelphia, Pa. Plaster for walls	Apr. 29, 1873	1, 121		3	490
136, 462	Smith, B. W., and E. O. Frink, Indianapolis, Ind. Steam and air brake	Mar. 4, 1873	91	32	3	253
	Smith, C. (See Smith, D. D., assignor.)					
135, 448	Smith, C., Irwin's Station, Pa. Harrow	Feb. 4, 1873	52	17	3	131
135, 495	Smith, C. A., Napa, Cal. Finger-bar for harvesters	Feb. 4, 1873	93	29	3	135
138, 588	Smith, C. D., Chicago, Ill. Furnace for steam-boilers	May 6, 1873	107	34	3	506
143, 305	Same..... Boiler-furnace	Sept. 30, 1873	862	295	4	361
	Smith, C. E. (See Warner & Smith.)					
	Smith, C. H. (See Hermann, D., assignor.)					
137, 626	Smith, C. H., Faribault, Minn. Sawing-machine	Apr. 8, 1873	316	98, 99	3	394
141, 086	Smith, C. H., Bloomer, Wis. Pile-driver	July 22, 1873	685	230	4	92
	Smith, C. S. (See Bender, Latrobe & Smith.)					
144, 417	Smith, C. T., Jersey City, N. J. Baking-pan	Nov. 11, 1873	219	72	4	508
	Smith, C. W. (See Guscetti, F., assignor.)					
138, 207	Smith, D., Springfield, Mass. Breech-loading fire-arm	Apr. 22, 1873	853	270	3	460
144, 572	Smith, D., Jamestown, N. Y. Milk-cooler	Nov. 11, 1873	347	117	4	518
141, 603	Smith, D., and J. C. Marshall, Springfield, Mass., said Marshall assignor to said Smith. Breech-loading fire-arm	Aug. 5, 1873	167	53, 54	4	148
142, 049	Smith, D. D., assignor of one-half interest to C. Smith, Louisville, Ky. Dumping-wagon	Aug. 19, 1873	594	195	4	200
	Smith, E. (See Smith, N. B., assignor.)					
5, 709	Smith, E., Albany, N. Y. Stove	Dec. 30, 1873	1, 000	322	4	713
137, 494	Smith, E., Whitestown, N. Y. Washing-machine	Apr. 1, 1873	198	61	3	373
140, 438	Smith, E. D., New York, N. Y. Sewing-machine	July 1, 1873	80	28	4	15
143, 728	Smith, E. D., Sutton Township, assignor of one-half interest to L. Ford, Dunham, Canada. Car-coupling	Oct. 14, 1873	309	102	4	413
5, 388	Smith, E. H., Bergen Heights, N. J. Sewing-machine	Apr. 29, 1873	1, 119	353	3	490
143, 538	Smith, E. H., assignor to R. Ball & Co., Worcester, Mass. Adjustable ratchet-rod	Oct. 7, 1873	121	41	4	390
138, 704	Smith, E. J., Washington, D. C. Stair-rod	May 6, 1873	210	66	3	514

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 967	Smith, E. P. (See Lafferty, R. M., assignor.) (Reissue.) Smith, E. P., Chicago, Ill. Dress-pattern	Apr. 15, 1873	623	197	3	432
137, 729	Smith, E. S. (See Smith, B. M., assignor.) Smith, E. S. (See Thayer, J., assignor.)	Apr. 8, 1873	412	127	3	402
143, 101	Smith, E. S., Good Hope, Ill. Windmill	Sept. 23, 1873	688	237	4	330
138, 589	Smith, F., Boston, assignor to J. Sully, trustee, Dedham, Mass. Rabbet-plane	May 6, 1873	108	35	3	506
6, 744	Smith, F. R., Bennington, Vt. Bed-spring	July 1, 1873			4	8
145, 914	Smith, F. W. (See Egge, F., assignor.) Same Game apparatus	Dec. 23, 1873	793	260	4	685
144, 151	Smith, F. W., Bridgeport, Conn. Toy bank	Oct. 28, 1873	708	235	4	466
6, 701	Smith, G., Williamsburgh, N. Y. Combined frier and broiler	June 10, 1873			3	640
135, 603	Smith, G., and H. Brown, Philadelphia, assignors to E. S. Shantz and O. B. Keeley, Spring City, Pa. Cooking-stove	Feb. 4, 1873	200	62	3	143
6, 887	Smith, G. A., Boston, Mass., assignor to W. H. W. Campbell, Norwich, Conn. Pencil-holder	Sept. 16, 1873			4	296
143, 539	Smith, G. E., et al. (See Scott, E. E., assignor.) Smith, G. E., Chicago, Ill. Aquarium-frame	Oct. 7, 1873	122		4	390
135, 376	Smith, G. F., et al. (See Brigham, C. H., assignor.) Smith, G. H., et al. (See Cliff & Martin, assignors.) Smith, G. H. (See Samson & Smith.)	Jan. 28, 1873	825	266	3	114
137, 495	Smith, G. K., assignor of one-half interest to G. W. Miller, Waterloo, Iowa. Composition-metal for casting plows	Apr. 1, 1873	199		3	373
135, 496	Smith, G. M. (See Smith, J. T. and G. M., & Sweeney.) Smith, G. M., assignor to L. A. Smith, Louisville, Ky. Duster	Feb. 4, 1873	94	30	3	135
140, 552	Smith, G. R. (See Leslie & Smith.) Smith, G. T., Minneapolis, Minn. Process of manufacturing middlings flour	July 1, 1873	180	61	4	23
5, 226	Smith, G. T. and A. Minneapolis, Minn. Flour-bolt	Jan. 7, 1873	216	69	3	24
6, 790	Smith, G. W., Darlington, Wis. Wheel for vehicles	July 29, 1873			4	108
6, 888	Smith, H., et al. (See Duckworth, W. B., assignor.) Smith, H. (See Smith, I. B. and H., & Bradley.) Smith, H., et al. (See Snyder, J. H., assignor.)	Sept. 16, 1873			4	296
140, 553	Smith, H., Shelby Station, Tenn. Horse-power	July 1, 1873	181	61	4	23
140, 554	Smith, H., assignor to J. Humphries & Sons, Kidderminster, England. Carpet	July 1, 1873	181	61	4	23
5, 710	Smith, H., assignor to self, Peck, Stow and Wilcox Company, Southington, Conn. Stove-pipe thimble	Dec. 30, 1873	1,002	323	4	713
5, 535	Smith, H., Southington, Conn. Wire cage	Aug. 19, 1873	611	201	4	201
138, 103	Smith, H., and D. B. Wesson, Springfield, Mass., assignors by mesne assignment to Winchester Repeating-Arms Company, New Haven, Conn. Breech-loading and repeating fire-arm	Apr. 22, 1873	762	242	3	453
136, 390	Smith, H. B., Smithville, N. J. Molding-machine	Mar. 4, 1873	34	12	3	248
137, 802	Same Scroll-saw	Apr. 15, 1873	487	152	3	421
139, 200	Smith, H. C., Cleveland, Ohio. Combined ironing-table, lap-board, and step-ladder	May 20, 1873	673	211	3	575
139, 201	Smith, H. D., & Co. (See Ward, W. S., assignor.) Same Machine for pressing clothes	May 20, 1873	674	211	3	575
139, 202	Same Mattress	May 20, 1873	675	212	3	576
137, 574	Smith, H. J., assignor to W. B. Fowle, Boston, Mass. Steering-apparatus for vessels	Apr. 8, 1873	276	85	3	391
137, 627	Smith, H. M., Chicago, Ill. Shipping can-shield	Apr. 8, 1873	317	99	3	394
139, 927	Same Can for oil	June 17, 1873	458	143	3	669
135, 167	Smith, I. (See McMaster, A. D., assignor.) Smith, I., Bruceport, Wash. Oyster-tongs	Jan. 21, 1873	612	199	3	84
137, 152	Smith, I., Tomhannock, N. Y. Hoisting-machine	Mar. 25, 1873	725	241	3	333
138, 946	Smith, I., Rochester, N. Y. Holder for brushes, mops, &c.	May 13, 1873	429	135	3	543
137, 326	Smith, I. B. and H., and C. Bradley, Bradford, England. Combing-machine	Apr. 1, 1873	47	14	3	361
137, 254	Smith, J., et al. (See Crowell, L. C., assignor.) Smith, J. (See Schirek & Smith.)	Mar. 25, 1873	822	270	3	340
137, 628	Smith, J., Woodland, Mich. Harrow	Apr. 8, 1873	318	99	3	394
138, 590	Smith, J., Chicago, Ill. Wardrobe-bedstead	May 6, 1873	108	35	3	506
143, 644	Smith, J., Philadelphia, Pa. Gymnastic apparatus	Oct. 14, 1873	226	76	4	407
144, 874	Smith, J., Old Ford, England. Combined indicator and safety-valve	Nov. 25, 1873	621	211	4	562
145, 131	Smith, J., Burlington, Wis. Threshing-machine	Dec. 2, 1873	90	29	4	592
140, 0-6	Smith, J., assignor to self and L. F. Terry, Southold, N. Y. Bolt for doors and gates	June 17, 1873	595	188	3	680
137, 101	Smith, J. and J., assignors to C. Button, Philadelphia, Pa. Knitting-machine	Mar. 25, 1873	682	227	3	330
137, 102	Smith, J. A., Erie, assignor to New Era Organ Company, Northeast, Pa. Organ treadles	Mar. 25, 1873	683	227	3	330
140, 654	Same Reed-organ stop-action	July 8, 1873	281	95	4	42
141, 468	Smith, J. A., Columbus, O. Sewing-machine	Aug. 5, 1873	52	16	4	139
141, 469	Smith, J. A., Erie, Pa. Reed-organ	Aug. 5, 1873	54	17	4	139
136, 555	Same Organ-stop action	Mar. 4, 1873	183	59	3	260
138, 208	Smith, J. B. (See Merrick, E. D., assignor.) Same (See Smith, B. F. and J. B.)	Apr. 22, 1873	854	270	3	460
143, 037	Smith, J. B., deceased, by B. Smith, administratrix, assignor to Randle & Heath, Memphis, Tenn. Earth-auger	Sept. 23, 1873	636	218	4	326
144, 152	Smith, J. B., Chicago, Ill. Toy-house	Oct. 28, 1873	708	236	4	466
7, 079	Smith, J. B., Sunapee, N. H. Machinery for making clothes-pins	Dec. 30, 1873			4	698
145, 598	Smith, J. D., Washington, D. C. Figures	Dec. 16, 1873	508	167	4	650
136, 341	Same Numbering-machine	Feb. 25, 1873	877	282	3	234
138, 947	Smith, J. D., Muskegon, Mich. Corn-planter	May 13, 1873	430	135	3	543
140, 655	Smith, J. D., assignor to J. D. Smith & H. R. Garvin, New York, N. Y. Expanding mandrel	July 8, 1873	281	95	4	42
6, 873	Smith, J. D., Sacramento, Cal. Combined scrubbing-brush, mop, and wringer	Sept. 2, 1873			4	242
137, 730	Smith, J. E., Waterbury, Conn. Belt-buckle	Apr. 8, 1873	413	127	3	402
142, 818	Smith, J. E., New York, N. Y. Circuits for electro-magnets	Sept. 16, 1873	447	151	4	300
143, 387	Smith, J. E., Jackson, Pa. Car-coupling	Sept. 30, 1873	937	317	4	367
136, 271	Smith, J. E., Sharpsburgh, assignor to self and T. J. Peters, Owingsville, Ky. Sewing-machine caster	Feb. 25, 1873	816	263	3	229
145, 249	Smith, J. G., Saint Louis, Mo. Wire-mattress frame	Dec. 2, 1873	189	65	4	600
141, 604	Same Wire-mattress	Aug. 5, 1873	168	54	4	149
6, 452	Smith, J. G., assignor to self and J. W. Brown, Boston, Mass. Railway-telegraph	Feb. 18, 1873			3	189
6, 453	Smith, J. H., Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpet	Feb. 18, 1873			3	189
6, 454	Same Carpet	Feb. 18, 1873			3	189
	Same same	Feb. 18, 1873			3	189

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6, 534	Smith, J. H., Enfield, assignor to Hartford Carpet Company, Hartford, Conn. Carpet. (Design)	Mar. 25, 1873			3	325
6, 610	Same..... Carpet..... (Design)	Apr. 22, 1873			3	445
6, 611	Same..... same..... (Design)	Apr. 22, 1873			3	445
6, 612	Same..... same..... (Design)	Apr. 22, 1873			3	445
6, 942	Same..... same..... (Design)	Oct. 7, 1873			4	380
6, 943	Same..... same..... (Design)	Oct. 7, 1873			4	380
6, 944	Same..... same..... (Design)	Oct. 7, 1873			4	380
6, 945	Same..... same..... (Design)	Oct. 7, 1873			4	380
7, 065	Same..... same..... (Design)	Dec. 16, 1873			4	641
7, 066	Same..... same..... (Design)	Dec. 16, 1873			4	641
135, 168	Smith, J. H., Orford, Iowa. Binders' table for harvesters.....	Jan. 21, 1873	612	{ 199 } { 200 }	3	84
140, 087	Smith, J. H., assignor of one-half interest to T. W. Bond & J. M. Henderson, Madison Run Station, Va. Process of welding steel to cast-iron.....	June 17, 1873	596		3	680
137, 255	Smith, J. M., Fort Wayne, Ind. Insect-trap.....	Mar. 25, 1873	822	270	3	340
139, 977	Smith, J. M., Milton, N. C. Tobacco-drier.....	June 17, 1873	494	156	3	672
136, 778	Smith, J. P., Terre Haute, Ind. Axle-boxes for vehicles.....	Mar. 11, 1873	383	126	3	285
142, 523	Smith, J. Q. A., Lee's Summit, Mo. Washing-machine.....	Sept. 2, 1873	179	59	4	256
7, 005	Smith, J. R., assignor to the Waterbury Button Company, Waterbury, Conn. Buckle. (Design)	Dec. 2, 1873			4	585
136, 871	Smith, J. S. (See Drake, E., assignor.) Smith, J. T., and G. M. & J. J. Sweeney, Springfield, Mass. Cartridge-ejector for revolving fire-arms.....	Mar. 18, 1873	470	156	3	301
	Smith, J. W. (See Potter & Smith)..... (Reissue.)					
137, 035	Smith, J. W., Columbus, Ga. Crushing-mill.....	Mar. 18, 1873	612	203	3	313
138, 540	Smith, J. W., Bryan, Ohio. Belt-lacing needle.....	May 6, 1873	64	22	3	503
139, 336	Smith, J. W., Battle Creek, Mich. Reach for bob-sleds.....	May 27, 1873	801	255	3	594
141, 087	Smith, J. W., Boston, Mass. Clasp for suspenders.....	July 22, 1873	686	230	4	92
136, 779	Smith, J. Y., Pittsburgh, Pa. Air-ejector.....	Mar. 11, 1873	383	127	3	285
136, 780	Same..... Steam air-ejector.....	Mar. 11, 1873	385	127	3	285
136, 781	Same..... Steam and air brake.....	Mar. 11, 1873	386	127	3	285
	Smith, L. administratrix. See Smith & De Coppet.) Smith, L. A. (See Redheffer, W., J., jr., and T. G., & Smith.) Smith, L. A. (See Smith, G. M., assignor.)					
140, 088	Smith, L. B., assignor to self and N. C. Hall, West Meriden, Conn. Can-opener.....	June 17, 1873	596	188	3	680
	Smith, L. E. (See Jordan & Smith)..... (Reissue.)					
140, 958	Smith, L. F., Philadelphia, Pa. Steam-cylinder lubricator.....	July 15, 1873	555	186	4	72
143, 645	Smith, L. H., Stryker, Ohio. Bolt and rod cutter.....	Oct. 14, 1873	227	76	4	407
	Smith, L. M. (See Loomer, L. H. & A. F., & Smith.) Smith, M. (See Cummings, Smith & Jordan.)					
137, 327	Smith, M. P., Baltimore, Md. Drying tomatoes.....	Apr. 1, 1873	48		3	361
	Smith, N. (See Chappell, B. F., assignor.)					
136, 556	Smith, N. B., New York, N. Y., assignor to self and E. Smith, New London, Conn. Button-fastening.....	Mar. 4, 1873	184	59	3	260
144, 875	Smith, N. D., Prairie City, Iowa. Lubricating compound.....	Nov. 25, 1873	621		4	562
135, 377	Smith, O. A., Middlefield, Conn. Revolving fire-arm.....	Jan. 28, 1873	826	266	3	114
135, 378	Same..... same.....	Jan. 28, 1873	826	266	3	114
137, 968	Same..... same.....	Apr. 15, 1873	625	197	3	432
143, 038	Smith, O. C., Ipswich, Mass. Propelling canal-boats.....	Sept. 23, 1873	637	218	4	326
5, 478	Smith, O. M., Philadelphia, Pa. Umbrella-runner..... (Reissue)	July 1, 1873	206	68	4	25
137, 256	Same..... Machine for cutting nicks in umbrella-runners.....	Mar. 4, 1873	823	{ 270 } { 271 }	3	340
136, 272	Smith, P. A., New York, N. Y. Railway snow-plow.....	Feb. 25, 1873	817	264	3	229
	Smith, P. W. (See Matchett & Smith.) Smith, R. (See Crowell & Smith)..... (Extension)					
6, 351	Smith, R., assignor to McKellar, Smiths & Jordan, Philadelphia, Pa. Printing-type. (Design)	Jan. 21, 1873			3	70
6, 736	Same..... Printing type..... (Design)	July 1, 1873			4	7
6, 769	Same..... same..... (Design)	July 8, 1873			4	36
6, 892	Same..... same..... (Design)	Sept. 23, 1873			4	322
6, 893	Same..... same..... (Design)	Sept. 23, 1873			4	322
5, 390	Smith, R. A., Newburyport, Mass. Brick-machine..... (Reissue)	Apr. 29, 1873	1, 122	354	3	490
141, 520	Same..... Brick-yard shed.....	Aug. 5, 1873	97	30	4	143
142, 745	Smith, R. A., Fond du Lac, and A. Schmid, Green Bay, Wis. Floor for refrigerator buildings, &c.....	Sept. 9, 1873	377	126	4	284
143, 471	Smith, R. A., Fond du Lac, Wis. Sheet-metal roofing.....	Oct. 7, 1873	61	21	4	386
143, 853	Smith, R. A., Newburyport, Mass. Truck for carrying brick.....	Oct. 21, 1873	439	146	4	434
136, 105	Smith, R. D. O., Washington, D. C. Ventilating water-closet and urinal.....	Feb. 18, 1873	657	215	3	204
140, 959	Smith, R. D. O., assignor to J. B. Slawson, Washington, D. C. Fare-box.....	July 15, 1873	556	{ 186 } { 187 }	4	73
	Smith, R. H. (See Goldthorp, S. H., assignor.) Smith, R. H., Pittsburgh, Pa. Manufacture of illuminating gas from petroleum, &c.....	Aug. 12, 1873	292	96	4	167
141, 732	Smith, R. T., et al. (See Fullam, A. J., assignor)..... (Reissue.) Same..... (See Priest, J. K., assignor.)					
135, 293	Smith, R. T., assignor to self, J. G. Blunt, J. K. Priest, and W. Earle, Nashua, N. H. Device for transmitting motive-power.....	Jan. 28, 1873	747	241	3	108
	Smith, S. (See Beesley, J., assignor)..... (Design.)					
135, 449	Smith, S., Philadelphia, P. Heating stove.....	Feb. 4, 1873	54	18	3	131
137, 153	Smith, S., Brooklyn, N. Y. Ash-sifter.....	Mar. 25, 1873	726	241	3	333
137, 328	Smith, S., Philadelphia, Pa. Stove-door frame.....	Apr. 1, 1873	49	14	3	361
139, 740	Same..... Modes of attaching stove-doors to their frames.....	June 10, 1873	285	88	3	648
141, 733	Smith, S., Halesworth, Great Britain. Mode of opening and closing the doors of vehicles.....	Aug. 12, 1873	293	96	4	167
143, 854	Smith, S., and J. H. Gill, Williamsburgh, N. Y. Spring-bed.....	Oct. 21, 1873	439	146	4	434
136, 391	Smith, S. A., Essex, Conn. Die for manufacturing augers.....	Mar. 4, 1873	34	13	3	248
138, 350	Smith, S. C., assignor of one-fourth interest to F. Curtis, Boston, Mass. Winding-click of watches.....	Apr. 29, 1873	1, 008	317	3	481
139, 431	Smith, S. H., assignor of one-half interest to W. H. Wilber, North Adams, Mich. Egg-carrier.....	May 27, 1873	890	287	3	600
144, 153	Smith, S. J., New York, N. Y. Locket.....	Oct. 28, 1873	710	236	4	466
	Smith, S. S., et al. (See Ross, J. G., assignor.)					
135, 048	Smith, T., Cleveland, Ohio. Dredge-box.....	Jan. 21, 1873	520	168	3	77
136, 782	Same..... Lantern-guard.....	Mar. 11, 1873	387	127	3	285
137, 867	Smith, T., Brooklyn, N. Y. Refrigerator water-cooler.....	Apr. 15, 1873	540	168	3	425

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139, 030	Smith, T., Cleveland, Ohio. Lantern.....	May 20, 1873	510	161	3	562
139, 337	Smith, T., assignor of one-half interest to R. Neville, New York, N. Y. Mode of fasten- ing diamonds into blocks or saw-teeth.....	May 27, 1873	801	256	3	594
141, 177	Smith, T., Waterford, N. Y. Car-coupling.....	July 22, 1873	775	253	4	99
142, 178	Smith, T., Brooklyn, N. Y. Water-cooler.....	Aug. 26, 1873	718	237	4	220
	Smith, T. G. (See Marden & Smith, assignors.).....					
	Smith, T. J., et al. (See Sweet, F. M., assignor)..... (Reissue.)					
139, 622	Smith, T. J., and J. Lee, assignors of part interest to J. J. Rich and J. Gallagher, Saint Louis, Mo. Wrench.....	June 3, 1873	153	51	3	621
	Smith, T. P., et al. (See Ross, J. G., assignor.).....					
	Smith, T. S. (See Marden & Smith.).....					
141, 393	Smith, T. S., Tooner's Station, Tenn., assignor of half interest to J. P. Gildersleeve, Niverville, N. Y., and J. W. Blake, Springfield, Mass. Cotton-press.....	July 29, 1873	991	322	4	124
	Smith, W. (See Harper & Smith.).....					
141, 241	Smith, W., Barnard Castle, England. Street-sweeper.....	July 29, 1873	846	276	4	112
142, 746	Smith, W., Pittsburgh, Pa. Core-barrel for casting.....	Sept. 9, 1873	378	127	4	284
7, 017	Smith, W. A., Niagara Falls, N. Y. Fan..... (Design)	Dec. 2, 1873			4	585
	Smith, W. C. (See Rousseau, D., assignor.).....					
141, 242	Smith, W. H., deceased, by L. Smith, administratrix, and F. V. De Coppet, New Orleans, La. Ammoniacal-gas engine.....	July 29, 1873	846	276	4	113
140, 656	Smith, W. M., assignor to H. Z. Ermentrout, Reading, Pa. Fishing-rod.....	July 8, 1873	282	95	4	42
145, 132	Smith, W. O., Boston, Mass. Attachment for stove-doors.....	Dec. 2, 1873	90	29	4	592
135, 016	Smith, W. P., New Orleans, La. Draw-point for driven well-tubes.....	Jan. 21, 1873	490	157	3	74
145, 022	Smith, W. R. W., Glasgow, North Britain. Smoke-consuming apparatus.....	Nov. 25, 1873	741	250	4	573
	Smith, W. T. (See Cox & Smith.).....					
	Smith, W. W., et al. (See Beach & Hanson, assignors.).....					
135, 450	Smith, W. W., Newcastle-on-Tyne, England. Anchor.....	Feb. 4, 1873	55	18	3	132
	Smithe, M. E. (See Eames, C. J., assignor.).....					
	Smock, D. P. (See Minthron, D., assignor.).....					
143, 855	Smoot, W. S., assignor of one-half interest to E. Remington & Sons, Ilion, N. Y. Re- volving fire-arm.....	Oct. 21, 1873	440	146	4	434
	Smyser, G. P. (See Spencer, G. H., assignor.).....					
141, 088	Smyth, D. M., Lynn, Mass., assignor to Stickler, Elliott & Wilson, New York, N. Y. } Sewing-machine.....	July 22, 1873	687	{ 230 231 }	{ 4 4 }	92
143, 388	Smyth, D. M., Lynn, Mass., assignor to H. G. Thompson, Milford, Conn. Tacking-ma- chine for boots and shoes.....	Sept. 30, 1873	938	318	4	367
140, 224	Smyth, S., East Bridgewater, Pa. Stove-grate.....	June 24, 1873	729	230	3	699
143, 856	Same..... Grate for stoves, furnaces, &c.....	Oct. 21, 1873	441	147	4	434
144, 293	Snedaker, W. B., Syracuse, N. Y. Car-coupling.....	Nov. 4, 1873	101	34	4	486
141, 605	Snedeker, D., New York, N. Y. Package for fruit.....	Aug. 5, 1873	170	54	4	149
5, 584	Snedden, S., Brooklyn, N. Y. Boat-detaching apparatus..... (Reissue)	Sept. 30, 1873	952	321	4	368
141, 470	Same..... same.....	Aug. 5, 1873	56	17	4	139
142, 955	Snediker, W. E., Charlottebury, N. J. Die for the manufacture of pinchers.....	Sept. 16, 1873	562	190	4	310
144, 801	Sneed, J. L., Frankfort, Ky. Blacking for shoes, &c.....	Nov. 18, 1873	545		4	545
143, 191	Snell, D., Springfield, Ohio. Tumbling-shaft.....	Sept. 23, 1873	758	261	4	336
141, 394	Snell, O., Williamsburgh, Ohio, assignor to R. B. Herron, Danville, Ind. Force-pump.....	July 29, 1873	992	322	4	124
	Sniffen, W. B. (See Coe & Sniffen)..... (Extension.)					
	Sniffen, W. (See Coe & Sniffen)..... (Disclaimer.)					
	Snively, E. V., et al. (See Lindsley, W. D., assignor.).....					
139, 432	Snively, F. M., Bellaire, Ohio. Trace-fastening.....	May 27, 1873	891	287	3	600
143, 935	Snow, G. H., West Meriden, Conn. Circuit-closer for railway-signals.....	Oct. 21, 1873	501	169	4	439
140, 736	Snow, G. K., Watertown, Mass. Paper box.....	July 8, 1873	348	117	4	48
143, 472	Snow, H. F., and J. H. Davis, Dover, N. H. Compound for painting and coating wood.....	Oct. 7, 1873	61		4	386
145, 692	Snow, L., and J. Haseltine, Boston, Mass. Child's carriage.....	Dec. 16, 1873	589	193	4	657
137, 496	Snow, W. B., Brooklyn, N. Y. Oil-still.....	Apr. 1, 1873	201	61	3	373
139, 203	Snow, W. B., Brooklyn, assignor to Eaton & Cole, New York, N. Y. Union-coupling.....	May 20, 1873	676	212	3	576
139, 829	Snyder, B., assignor to S. D. Snyder and A. C. Leidy, Philadelphia, Pa. Crib-attachment for bedsteads.....	June 10, 1873	364	113	3	654
139, 978	Snyder, F., New York, N. Y. Child's carriage.....	June 17, 1873	495	156	3	672
138, 821	Snyder, F. H., Jersey City, N. J., assignor to T. Hyslop, New York, N. Y. Preparing sawdust for use in the arts.....	May 13, 1873	325		3	534
	Snyder, G. W., et al. (See Moodey, B. D., assignor.).....					
136, 392	Snyder, G. W., Port Carbon, and L. W. Snyder, Lykens, Pa. Car-wheel.....	Mar. 4, 1873	35	13	3	248
143, 192	Snyder, I. E., Woodward, Pa. Horse hay-fork.....	Sept. 23, 1873	759	262	4	336
142, 050	Snyder, J. H., assignor to self, T. B. Gault, and H. Smith, Rockford, Ill. Carriage-top.....	Aug. 19, 1873	594	195	4	200
139, 272	Snyder, J. W., Chicago, Ill. Laying concrete pavements.....	May 27, 1873	752	238	3	589
	Snyder, L. W. (See Snyder, G. W. & L. W.).....					
	Snyder, S. D. et al. (See Snyder, B., assignor.).....					
144, 483	Snyder, U., Conshohocken, Pa. Horseshoe.....	Nov. 11, 1873	270	91	4	512
144, 709	Snyder, W. C., assignor of one-half interest to J. H. Beelman, Richmond Township, Huron County, Ohio. Seat for vehicles.....	Nov. 18, 1873	467	158	4	539
139, 741	Soetbeer, T., Irvington, N. Y. Lawn-mower.....	June 10, 1873	286	89	3	648
138, 948	Solliday, R., Allentown, Pa. Ore-washer.....	May 13, 1873	431	135	3	543
145, 455	Same..... Same.....	Dec. 9, 1873	370	123	4	627
136, 463	Solvay, E., Brussels, Belgium. Process and apparatus for the manufacture of carbonate of soda.....	Mar. 4, 1873	94	32, 33	3	253
143, 039	Somerville, J., and J. Robinson, Dublin, Ireland. Apparatus for charging gas-retorts ..	Sept. 23, 1873	638	{ 218 219 }	{ 4 4 }	326
	Sommer, G., et al. (See Moore, C., assignor.).....					
137, 154	Sondheim, L. H., New York, N. Y. Breast-pin tongue.....	Mar. 25, 1873	726	241	3	333
5, 299	Sonnekalb, A., and J. W. Lieb, said Sonnekalb assignor to said Lieb, Newark, N. J. } Traveling-bag..... (Reissue.)	Feb. 25, 1873	895	{ 287 288 }	{ 3 3 }	235
140, 225	Sonnichsen, N., San Francisco, Cal. Kindling-wood cutter.....	June 24, 1873	730	230	3	699
145, 761	Sontag, F. A. R. and W. H. Lotz, Chicago, Ill. Fire-proof safe.....	Dec. 23, 1873	663	216	4	675
	Sontag, H. (See Dobson, H. C., assignor.).....					
134, 943	Sontag, H., Saint Louis, Mo. Expanding rock-drills for shaft-boring apparatus.....	Jan. 14, 1873	410	131	3	53
	Soothill, J. (See Lewis & Soothill.).....					
144, 710	Soper, A., New York, N. Y. Grain-drier.....	Nov. 18, 1873	468	159	4	539
134, 569	Sorensen, A. J., assignor to Burdett Organ Company, Erie, Pa. Cabinet-organ case.....	Jan. 7, 1873	64	19	3	12
139, 483	Same..... Reed-organ.....	June 3, 1873	37	12	3	612
140, 226	Sorg, A. and S. C. Bollman, Decatur, Ind. Earth-auger.....	June 24, 1873	720	230	3	699
137, 868	Souder, D., Houston, Ohio. Cradle.....	Apr. 15, 1873	541	168	3	425
	Souder, J. D. (See Sparks, W. H., assignor.).....					
	Soule, O. F. (See Merrill & Soule.).....					
143, 263	Soule, S. W., New York, N. Y. Plow.....	Sept. 30, 1873	826	283	4	358

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 103	Soules, S. (<i>See</i> Welling & Soules.)					
139, 742	Soursin, A., St. Louis, Mo. Whiffle-tree attachments for vehicles.....	Mar. 25, 1873	685	227	3	330
6, 831	Southard, A. P., St. Louis, Mo. Tobacco-finisher.....	June 10, 1873	287	89	3	648
141, 734	Southard, W. D., New York, N. Y. Stove..... (Design).....	Aug. 26, 1873			4	212
135, 734	Souther, L., Springfield, Ill. Machine for making chains.....	Aug. 12, 1873	294	96	4	167
142, 289	Southwick, A. N., Boston, Mass. Belt-punch.....	Feb. 11, 1873	322	103	3	165
134, 821	Southwick, A. P. Buffalo, N. Y. Manufacturing illuminating gas.....	Aug. 26, 1873	808	267	4	227
	Southwick, J. M. K., Newport, R. I. Row-lock.....	Jan. 14, 1873	307	98	3	45
	Southwick, O. M., <i>et al.</i> (<i>See</i> Thayer, W. H., assignor.)					
	Southworth, E. W. (<i>See</i> Seather, Southworth, and Anthony.)					
	Southworth, S., <i>et al.</i> (<i>See</i> Baird, O. D., assignor.)					
139, 090	Spahn, E. P., Newark, N. J. Photographic-camera.....	May 20, 1873	569	178	3	567
137, 629	Spalding, O. D., Mankato, Minn. Wheel for vehicles.....	Apr. 8, 1873	319	99	3	394
144, 573	Same..... Heating-drum.....	Nov. 11, 1873	347	117	4	518
140, 737	Spang, H. W., Reading, Pa. Electric railway signal.....	July 8, 1873	349	118	4	48
141, 395	Same..... Electric railway-signal apparatus.....	July 29, 1873	993	322	4	124
142, 131	Same..... Circuit-closer for railway-signaling apparatus.....	Aug. 26, 1873	680	223	4	217
141, 018	Sparks, W. H., Absecum, assignor of one-half interest to J. D. Souder, Williamstown, N. J. Axle and sleeve for vehicles.....	July 22, 1873	627	211	4	87
144, 418	Sparks, W. H., Absecum, N. J. Ironing-table.....	Nov. 11, 1873	219	73	4	508
136, 464	Sparr, J. F., Rochester, N. Y. Steering apparatus.....	Mar. 4, 1873	97	33	3	253
138, 705	Sparrow, J., Portland, Me. Centrifugal machine.....	May 6, 1873	211	66	3	514
	Spaulding, C. F., <i>et al.</i> (<i>See</i> Hollenweger, F. J., assignor.)					
139, 338	Spaulding, E., Keene, N. H. Mortar mixer and grinder.....	May 27, 1873	802	256	3	594
139, 339	Spaulding, E. F., Cambridge, Mass. Steam and other valves.....	May 27, 1873	803	256	3	594
141, 471	Spaulding, E. F., Cambridgeport, Mass. Stop-cock.....	Aug. 5, 1873	56	17	4	139
140, 738	Spaulding, G. H., Rockford, Ill. Harvester.....	July 8, 1873	351	118	4	48
135, 944	Spaulding, G. W., and W. T. Carroll, Woonsocket, R. I. Ring, rail, and holder for spinning.....	Feb. 18, 1873	518	169	3	194
142, 243	Spaulding, J., San Francisco, Cal. Carpet-cleaner.....	July 29, 1873	848	277	4	113
141, 876	Spayd, C. W., Wilkesbarre, Pa. Wheel for vehicles.....	Sept. 16, 1873	494	168	4	304
145, 456	Same..... Railway-switch signal.....	Dec. 9, 1873	370	123	4	627
144, 802	Speak, J., Philadelphia, Pa. Syringe and pump.....	Nov. 18, 1873	545	185	4	545
5, 314	Spear, J., Philadelphia, Pa. Heating-stove..... (Reissue).....	Mar. 4, 1873	216	71	3	363
5, 459	Same..... Base-burning stove..... (Reissue).....	June 17, 1873	629	197	3	683
5, 460	Same..... same..... (Reissue).....	June 17, 1873	630	197	3	683
	Spear, J. D., <i>et al.</i> (<i>See</i> Knowlton, C. H., assignor.)					
	Spear, V. K., <i>et al.</i> (<i>See</i> Ross & Miller, assignor.)					
	Same..... (<i>See</i> Ross, J. G., assignor.)					
139, 273	Spear, V. K., Lynn, Mass. Heel-breasting machine.....	May 27, 1873	753	239	3	589
141, 735	Same..... Heel-breasting machinery.....	Aug. 12, 1873	296	97	4	167
139, 623	Spears, J. H., and K. and R. Wells, Piper City, Ill. Corn harvester.....	June 3, 1873	154	51	3	621
134, 822	Specht, J., Memphis, Tenn. Composition for coating metal pipes, roofing, &c.....	Jan. 14, 1873	308		3	45
	Speck, J. P. (<i>See</i> Foreman & Speck.)					
	Speck, T. J. (<i>See</i> Arndt, A. H., assignor.)					
144, 231	Speelmon, P., Knox, Ind. Sulky-harrow.....	Nov. 4, 1873	56	17	4	482
	Speer, Clarke & Co. (<i>See</i> Strawn & Drum, assignors.)					
	Speer, W. H. (<i>See</i> Hug, D., assignor.)					
140, 089	Spellman, W. C., Hartford, Conn. Show-case.....	June 17, 1873	596	188	3	680
138, 949	Spelman, S., Brooklyn, N. Y. Supplementary wheel for car-trucks.....	May 13, 1873	431	135	3	543
145, 457	Spence, A., assignor of one-half interest to P. H. Ferguson, Montreal, Canada. Water-heater.....	Dec. 9, 1873	371	123	4	627
142, 956	Spence, J. F., Williamsburg, N. Y., assignor to G. D. and M. C. Brooks, Baltimore, Md. Soldering machine.....	Sept. 16, 1873	563	191	4	310
137, 497	Spencer, A., jr., Penn Yan, and T. C. Spencer, Elmira, assignors of one-third interest to E. M. Birdsall, Penn Yan, N. Y. Steam-boiler feeder.....	Apr. 1, 1873	202	61	3	373
135, 251	Spencer, A. B., Cleveland, Ohio. Refrigerator.....	Jan. 28, 1873	715	229	3	105
	Spencer, A. H. (<i>See</i> Palmer & Spencer.)					
144, 876	Spencer, C. B., assignor of one-half interest to M. Marx, Hastings, Minn. Umbrella.....	Nov. 25, 1873	622	211	4	562
145, 023	Spencer, C. B., Hastings, Minn. Bed-bottom.....	Nov. 25, 1873	741	250	4	573
142, 051	Spencer, C. F., Cleveland, Ohio. Self-venting bung.....	Aug. 19, 1873	595	196	4	240
135, 671	Spencer, C. M., Hartford, Conn. Breech-loading fire-arm.....	Feb. 11, 1873	269	85	3	161
137, 630	Same..... Machine for turning and cutting wire.....	Apr. 8, 1873	319	100	3	394
137, 631	Same..... Machine for turning heads of bobbins.....	Apr. 8, 1873	320	100	3	394
143, 306	Same..... Machine for making metal screws.....	Sept. 30, 1873	863	296	4	361
145, 250	Same..... Machine for forming wire-loops.....	Dec. 2, 1873	190	65, 66	4	600
137, 104	Spencer, G. H., assignor to self and G. P. Smayser, York, Pa. Machine for grinding metal castings.....	Mar. 25, 1873	686	228	3	330
141, 089	Spencer, J., Chicago, Ill. Spinning-top.....	July 22, 1873	687	231	4	92
138, 591	Spencer, J. C., assignor to self and F. X. Gervis, Phelps, N. Y. Plane.....	May 6, 1873	109	35	3	506
143, 936	Spencer, J. C., assignor of two-thirds interest to J. K. Babcock, C. M. Miller, and E. C. Hoff, Phelps, N. Y. Rotary engine.....	Oct. 21, 1873	503	169	4	439
138, 351	Spencer, J. M., La Plata, Mo. Portable stock-feeder.....	Apr. 29, 1873	1,009	317	3	481
135, 169	Spencer, S., Kiantone, N. Y. Milk-cooler.....	Jan. 21, 1873	613	200	3	84
	Spencer, S. H. (<i>See</i> Sadler & Spencer.)					
	Spencer, T. C. (<i>See</i> Spencer, A., jr., and T. C.)					
6, 582	Spencer, T. P., Morrisania, N. Y. Revolving bottle-stand..... (Design).....	Apr. 8, 1873			3	387
137, 498	Spencer, W. D., and E. Parker, said Spencer assignor to said Parker, New Britain, Conn. Spring bed-bottom.....	Apr. 1, 1873	203	62	3	373
141, 090	Spencer, W. H., New York, N. Y. Apparatus for the manufacture of gas.....	July 22, 1873	688	231	4	92
142, 524	Spencer, P. I., assignor to D. Myers, Cleveland, Ohio. Suppository-mold.....	Sept. 2, 1873	180	59	4	256
	Sperry, A., <i>et al.</i> (<i>See</i> Sperry & Robinson, assignors)..... (Reissue).....					
143, 307	Sperry, C. J., and L. Chandler, New London, Minn. Bee-hive.....	Sept. 30, 1873	864	296	4	361
5, 331	Sperry, L., East Windsor Hill, and L. Robinson, New Haven, Conn., assignors to L. and A. Sperry. Cradle..... (Reissue).....	Mar. 18, 1873	629	207	3	314
135, 379	Sperry, T. S., New York, N. Y. Bustle.....	Jan. 28, 1873	827	267	3	114
	Spicer, P. A. (<i>See</i> Crossman & Spicer)..... (Reissue).....					
137, 329	Spickler, H. D., Canton, Ohio. Wood-scraper.....	Apr. 1, 1873	50	15	3	361
142, 957	Spiegel, A., Indianapolis, Ind. Hinge for lounges.....	Sept. 16, 1873	564	191	4	310
136, 624	Spiehman, G., Strasburgh, Pa. Meat-chopping machine.....	Mar. 11, 1873	258	87	3	275
136, 106	Spielman, C. L., Blandinsville, Ill. Stalk-chopper.....	Feb. 18, 1873	658	215	3	204
135, 672	Spless, F. W. C., New York, N. Y. Candying-machine.....	Feb. 11, 1873	270	85	3	161
144, 232	Spiller, O. M., Cleveland, Ohio. Non-conducting filling for the walls of dinner-pails, &c.....	Nov. 4, 1873	57	17	4	482
	Spire, G. (<i>See</i> Frank & Spire.)					

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	Splawn, I. V. (See Baisley, G. H., assignor)					
138, 209	Spofford, N., Haverhill, Mass. Brace for bits..... (Extension)	Nov. 1, 1873			4	452
145, 762	Spooner, A. F., Sterling, Ill. Baby-jumper.....	Apr. 22, 1873	855	271	3	460
145, 133	Spooner, D. B., Syracuse, N. Y. Manufacturing rubber diaphragms for water-meters....	Dec. 23, 1873	664	217	4	675
140, 170	Spooner, W. A., Springfield, Mass. Pump-box.....	Dec. 2, 1873	91	29	4	592
	Sprague, A. J., Binghamton, N. Y. Whiffletree.....	June 24, 1873	686	215	3	695
	Sprague, A. M., deceased, by C. Sprague, administratrix, Pleasant Hill, Ky. Apparatus for skimming the surface of water in steam-boilers..... (Extension)	Mar. 22, 1873			3	272
140, 555	Sprague, A. V. M., Rochester, N. Y. Check-hook.....	July 1, 1873	182	62	4	23
137, 632	Sprague, A. W., Quincy, and J. M. Osgood, Somerville, Mass.; said Osgood assignor to said Sprague. Automatic draught-regulator for stoves and furnaces..... (Extension)	Apr. 8, 1873	321	100	3	394
	Sprague, C., administratrix. (See Sprague, A. M.).....					
	Sprague, D. J., et al. (See Roosevelt, W. H., assignor.).....					
134, 944	Sprague, E., Allegheny, Pa. Cam for operating valves for steam-engines.....	Jan. 14, 1873	411	132	3	53
137, 105	Sprague, E. H., Mount Vernon, Ohio. Horse-collar fastening.....	Mar. 25, 1873	687	228	3	330
139, 433	Sprague, E. J., Youngstown, Ohio. Cooking-utensil.....	May 27, 1873	891	287	3	601
140, 313	Same..... Lap-board.....	June 24, 1873	805	255	3	706
141, 178	Same..... Combined sash-fastener and weather-strip.....	July 22, 1873	775	253	4	99
	Sprague, W. (See Russell, J., assignor.).....					
143, 389	Sprague, W. N., Keene, N. H., assignor to self and G. Goodyear, Elizabeth, N. J. Shank-stiffener.....	Sept. 30, 1873	939	318	4	367
145, 024	Same..... Machinery for making wood-shanks for boots and shoes.....	Nov. 25, 1873	742	250	4	573
	Spring, A. (See Spring, C. and A.)..... (Extension)					
	Spring, C. and A., Hyde Park, Mass. Lathe for turning irregular forms..... (Extension)	May 10, 1873			3	497
137, 731	Springer, H., Brady Township, Mich. Milking-pail.....	Apr. 8, 1873	415	127	3	402
141, 606	Same..... Fertilizing-attachment to seed-sowers.....	Aug. 5, 1873	171	55	4	149
146, 103	Springer, T., assignor to self and G. Autenrieth, Hunter's Point, N. Y. Piano-pedal stool.....	Dec. 30, 1873	983	317	4	711
142, 525	Springer, T. G., New York, N. Y. Apparatus for carbureting and regulating the pressure of gas.....	Sept. 2, 1873	181	59, 60	4	256
142, 526	Same..... Blind-slat fastener.....	Sept. 2, 1873	183	60	4	256
142, 290	Springer, W. A., Marlborough, Mass. Trimming-attachment for sewing-machines.....	Aug. 26, 1873	810	268	4	228
142, 819	Springer, W. A., assignor to self, T. Corey, and C. D. Hunter, Marlborough, Mass. Guide for sewing-machines.....	Sept. 16, 1873	447	151	4	300
136, 783	Springer, W. P., Oswego, N. Y. Summer furnace.....	Mar. 11, 1873	388	128	3	285
144, 711	Springsteen, A., Oquawka, Ill. Corn-planter.....	Nov. 18, 1873	469	159	4	539
137, 155	Springwater, M., Evansville, Ind. Liquid-measuring register.....	Mar. 25, 1873	727	242	3	333
136, 941	Sprinkle, G., North Leverett, Mass. Stone-puller.....	Mar. 18, 1873	531	176	3	306
139, 274	Sprogle, D. M., Annapolis, Md. Process of making artificial stone.....	May 27, 1873	756	239	3	590
	Squier, G. L. (See Stevens, H. B., assignor.).....					
135, 945	Squires, J. A., New York, N. Y. Stay-log.....	Feb. 18, 1873	518	169	3	194
142, 591	Same..... Machine for cutting veneers.....	Sept. 9, 1873	249	82	4	274
135, 946	Squires, R. S., Cleveland, Ohio. Dinner-pail.....	Feb. 18, 1873	520	170	3	194
145, 073	Staats, R. P., assignor to self and F. A. Stout, New York, N. Y. Clasp for elastic bands.....	Dec. 2, 1873	30	10	4	588
140, 739	Stackhouse, P. M., Pineville, Pa. Butter-worker.....	July 8, 1873	352	118	4	48
	Stackman, W. (See Scripture & Stackman.).....					
144, 364	Stackpole, G., Elizabeth, N. J. Rubber eraser.....	Nov. 4, 1873	160	53	4	491
	Stackpole, G. W. (See Wentworth, F. W., assignor).....					
	Stacy, C. L., Cincinnati, Ohio. Hydrant..... (Extension)	Oct. 4, 1873			4	353
144, 638	Stacy, G., Nanuet, N. Y. Revolving hammer.....	Nov. 18, 1873	408	137	4	534
144, 639	Same..... Mode of fastening cutters in stone-cutters' and other tools.....	Nov. 18, 1873	410	138	4	534
144, 640	Same..... Stone-cutter.....	Nov. 18, 1873	411	138	4	534
136, 942	Stacy, M. E., Thomasville, Ga. Rice-huller.....	Mar. 18, 1873	532	176	3	306
146, 104	Staehlen, W., assignor to C. F. A. Hinrichs, Brooklyn, N. Y. Drop-light and hanger.....	Dec. 30, 1873	984	318	4	711
136, 872	Stafford, J. A., and H. C. Fowler, Cleveland, Ohio. Process for treating tobacco.....	Mar. 18, 1873	471		3	301
140, 090	Staffin, N., Chicago, Ill. Watch-regulator.....	June 17, 1873	597	188	3	680
135, 604	Stahl, J. H., Stanton's Mills, Pa. Mortising-machine.....	Feb. 4, 1873	201	62	3	143
	Staib, J. (See Doubrava & Staib.).....					
146, 105	Stairs, J. F., Halifax, Canada. Coating oakum with tar, &c.....	Dec. 30, 1873	985	318	4	711
142, 747	Staley, A., San Francisco, Cal. Reciprocating engine.....	Sept. 9, 1873	379	127	4	284
	Staley, G. W. (See Frankfoder, D., assignor.).....					
141, 897	Stall, F. A., Boston, Mass. Compound for paint.....	Aug. 19, 1873	458		4	189
145, 025	Saint Amant, O., assignor of one-half interest to J. Woodley, Quebec, Canada. Sew- ing-machine.....	Nov. 25, 1873	743	{ 251 252 }	{ 4 3 }	{ 573 365 }
137, 390	Stamberger, F., Clarion, Ill. Apparatus for supplying salt to cattle.....	Apr. 1, 1873	100	32	3	365
	Stanbery, G. A. (See Platt & Stanbery.).....					
138, 950	Stanchiff, G., New York, N. Y. Hoisting and conveying apparatus.....	May 13, 1873	432	136	3	543
139, 743	Standing, W., Du Quoin, Ill. Process of preparing corn for grinding.....	June 10, 1873	287		3	648
	Standish, S. (See Packard & Standish.).....					
136, 273	Standish, S., Eureka, Nev. Broom.....	Feb. 25, 1873	818	264	3	229
140, 314	Same..... Paint-brush.....	June 24, 1873	806	256	3	706
	Standt, E. (See Bright & Standt.).....					
139, 523	Stanford, C. P., San Francisco, Cal. Ore-feeder for grinding and crushing mills.....	June 3, 1873	67	23	3	614
139, 204	Same..... same.....	May 20, 1873	676	212	3	576
137, 969	Stanford, E. C. C., Glasgow, Scotland. Deodorizing animal matters for fertilizers, &c.....	Apr. 15, 1873	626		3	432
	Stanley, R. (See Baird, J. M., assignor.).....					
	Stanley Rule and Level Company. (See Sargent, S. D., assignor.).....					
	Same..... (See Traut, J. A., assignor.).....					
137, 633	Stanley, W. B., Groveton, N. H. Wagon-brake.....	Apr. 8, 1873	322	100	3	395
137, 575	Stansbury, J. A., Salem, Ohio. Printers' miter-machine.....	Apr. 8, 1873	277	85	3	391
134, 775	Stanton, J. P., and R. C. Pedrick, Pedricktown, N. J. Transplanter.....	Jan. 14, 1873	262	86	3	41
137, 330	Stanton, J. W., Brooklyn, N. Y. Generator for generating carbonic-acid gas.....	Apr. 1, 1873	50	15	3	361
145, 134	Stanton, J. W., assignor to J. H. Colton, Brooklyn, said Colton assignor of one-half interest to C. M. Martin, New York, N. Y. Method of extinguishing fire in oil-tanks, &c..... (Extension)	Dec. 2, 1873	92	29	4	592
	Stanwood, J. E., Malden, Mass. Gas-pipe cutter.....	Apr. 26, 1873			3	444
141, 019	Staples, E. W., jr., Norwich, Conn. Fastening for sliding-doors.....	July 22, 1873	627	211	4	88
140, 796	Staples, M. W., Richmond, Va. Reciprocating churn.....	July 15, 1873	405	138	4	60
142, 958	Same..... Washing-machine.....	Sept. 16, 1873	565	191	4	310
144, 365	Same..... same.....	Nov. 4, 1873	161	53	4	491
	Stapleton, W. H. (See Preston, F. B., assignor.).....					
135, 605	Starbrick, R., Wilmington, Ohio. Ditching-machine.....	Feb. 4, 1873	202	63	3	143
	Starbuck, B., et al. (See Richardson, G. W., assignor.).....					
	Starbuck, G. H., et al. (See Richardson, G. W., assignor.).....					
139, 205	Stark, A. H., Nevada, Iowa. Corn-planter.....	May 20, 1873	677	{ 212 213 }	{ 3 3 }	{ 576 576 }
141, 824	Stark, J., Waltham, Mass. Watchmakers' lathe-chuck.....	Aug. 12, 1873	378	124	4	173

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143, 857	Stark, J., Waltham, Mass. Watchmakers' staking-tool.	Oct. 21, 1873	441	147	4	434
142, 132	Stark, J. P., assignor of one-half interest to J. F. Simpson, Morrisville, Ill. Weather-threshold.	Aug. 26, 1873	681	224	4	217
	Starke, A. (<i>See</i> Jones, J. D., assignor.)					
141, 960	Starke, P. H., Richmond, Va. Plow.	Aug. 19, 1873	506	167	4	193
138, 446	Starke, W., Chicago, Ill. Spring bed-bottom.	Apr. 29, 1873	1,093	345	3	487
144, 712	Starks, G., assignor to the Albert Field Tack Company, Taunton, Mass. Coating tacks, nails, and screws to prevent corrosion, and to color them.	Nov. 18, 1873	470	159	4	539
143, 540	Starnes, J. E., Worthington, Ind. Attachment to chimneys or flues.	Oct. 7, 1873	123	41	4	390
	Starr, E. F. (<i>See</i> Houston, E. J., assignor.)					
142, 527	Starr, H. D., Texana, Tex. Cotton-bale tie.	Sept. 2, 1873	183	60	4	256
144, 484	Starr, J. M., Richmond, Ind. Mechanism for stopping and starting street-cars.	Nov. 11, 1873	271	92	4	512
141, 521	Starr, J. W., Camden, N. J. Valve-register.	Aug. 5, 1873	97	30	4	143
145, 458	Starr, S. H., Philadelphia, Pa. Subaqueous gas-stove.	Dec. 9, 1873	372	124	4	627
142, 656	Starrett, G. W., Dublin, Ohio. Corn-planter.	Sept. 9, 1873	300	99	4	278
137, 803	Starrett, L. S., assignor to Athol Machine Company, Athol Depot, Mass. Meat or fruit press.	Apr. 15, 1873	487	152	3	421
144, 419	Starritt, J. D., Chicago, Ill. Rotary-cultivator.	Nov. 11, 1873	220	73	4	508
145, 313	Staten, W. F., Jasper, Fla. Medical compound for treating the hair.	Dec. 9, 1873	253		4	618
144, 233	Statz, J., Cross Plains, Wis. Corn-planter.	Nov. 4, 1873	57	17, 18	4	483
138, 052	Staude, H., Troy, N. Y. Pocket-knife.	Apr. 22, 1873	721	228	3	449
145, 312	Staugaard, H. H., Chicago, Ill. Bureau and wardrobe combined.	Dec. 9, 1873	252	84	4	618
	Stearns, A. C. (<i>See</i> Hungerford, F., assignor.)					
141, 672	Stearns, E. H., Erie, Pa. Circular saw-mill.	Aug. 12, 1873	245	78	4	163
143, 264	Same. Edging-machine.	Sept. 30, 1873	827	284	4	358
144, 154	Same. Sawing-machine.	Oct. 28, 1873	710	237	4	466
145, 026	Same. Saw-mill dog.	Nov. 25, 1873	746	252	4	573
143, 308	Stearns, G., Eldorado Mills, Wis. Windmill.	Sept. 30, 1873	865	296	4	361
5, 574	Stearns, G. N., Syracuse, N. Y. Vise. (Reissue).	Sept. 16, 1873	583	197	4	312
	Stearns, H. A. (<i>See</i> Brown, J. R., assignor.)					
5, 344	Stearns, J. B., Boston, Mass., assignor to The Western Union Telegraph Company. Duplex-telegraph apparatus. (Reissue).	Apr. 1, 1873	227	69	3	375
134, 776	Stearns, J. B., Boston, Mass. Repeater for duplex telegraphs.	Jan. 14, 1873	263	86	3	41
136, 274	Same. Duplex-telegraph instrument.	Feb. 25, 1873	818	264	3	229
136, 873	Same. Duplex-telegraph.	Mar. 18, 1873	472	156 } 157 }	3	302
136, 874	Same. same.	Mar. 18, 1873	473	157	3	302
136, 875	Same. Duplex-telegraph key.	Mar. 18, 1873	475	157	3	302
136, 876	Same. Telegraph relay and sounder.	Mar. 18, 1873	475	158	3	302
	Stearns Manufacturing Company. (<i>See</i> Torrent, J., assignor.)					
6, 487	Stearns, T. J., Natick, Mass., assignor to Roxbury Carpet Company, Boston, Mass. Carpet. (Design).	Mar. 4, 1873			3	245
	Stearns, W., Manchester, N. H. Picker-motion for power-looms. (Extension).	July 5, 1873			4	7
24, 668	Same. same. (Disclaimer filed).	June 30, 1873			4	7
142, 592	Same. Loom-picking mechanism.	Sept. 9, 1873	249	82	4	274
138, 053	Stebbins, E. E., Meadville, Pa. Instrument for drawing scrolls.	Apr. 22, 1873	722	228	3	449
	Stebbins, G. P. (<i>See</i> Stebbins, L., assignor.)					
135, 017	Stebbins, L., Hinsdale, N. H., assignor to self and P. G. Stebbins, Vernon, Vt. Railway-car brake.	Jan. 21, 1873	492	158	3	75
136, 186	Stebbins, M. C., Springfield, Mass. Inkstand-filler.	Feb. 25, 1873	743	240	3	223
137, 732	Stebbins, M. C., and E. J. Piper, said Stebbins assignor to said Piper, Springfield, Mass. School-desk.	Apr. 8, 1873	415	128	3	402
139, 624	Stebins, T., San Francisco, Cal. Hydraulic elevator.	June 3, 1873	155	52	3	621
143, 789	Steck, G., New York, N. Y. Grand piano.	Oct. 21, 1873	381	126	4	429
137, 106	Stedman, E. E., Ravenna, Ohio. Clasp for preventing ingrowing of toe-nails.	Mar. 25, 1873	688	229	3	330
134, 710	Stedman, O. F., Westfield, N. Y. Draught-pipe for aerated liquids.	Jan. 7, 1873	198	64	3	22
144, 234	Same. Attachment for soda-fountains.	Nov. 4, 1873	58	18	4	483
142, 179	Steel, R., assignor of one-half interest to J. S. and H. S. Richards, Philadelphia, Pa. Railway-rail.	Aug. 26, 1873	718	237	4	220
144, 235	Steel, R., and S. Austin, assignors of one-half interest to J. Leeds, Philadelphia, Pa. Car-propeller.	Nov. 4, 1873	59	18	4	483
	Steel, S. S. (<i>See</i> Salisbury & Steel.)					
	Steele & Condict, et al. (<i>See</i> Kirkup, L., assignor.)					
	Steele, D. S., et al. (<i>See</i> Stevens, W. J., assignor.)					
6, 535	Steele, E. J., assignor to Sargent & Co., New Haven, Conn. Boot-jack. (Design).	Mar. 25, 1873			3	325
6, 583	Same. Paper-file. (Design).	Apr. 8, 1873			3	387
6, 723	Same. Lock-front. (Design).	June 24, 1873			3	691
143, 858	Steele, F., assignor to self, H. S. and E. M. Jewell, Brooklyn, N. Y. Alarm safety-valve.	Oct. 21, 1873	442	147	4	434
145, 369	Steele, F., assignor to American Steam and Water Recording Company, Brooklyn, N. Y. Low-water indicator.	Dec. 9, 1873	296	100	4	622
141, 961	Steenbergen, P. H., Chico, Cal. Medical compound or piles-liniment.	Aug. 19, 1873	508		4	193
140, 960	Steers, T., assignor of one-half interest to W. G. Hamilton, Milton, Wis. Farm-gate.	July 15, 1873	558	187	4	1
137, 499	Steffensen, J., Lyons, Iowa. Road-scraper.	Apr. 1, 1873	204	62	3	373
	Steger, J. (<i>See</i> Field & Steger.)					
144, 294	Stenlin, C. V. and J., New York, and H. A. Haan, Brooklyn, N. Y. Process of manufacturing paper from grains.	Nov. 4, 1873	102		4	486
	Stehlin, J. (<i>See</i> Stehlin, C. V. and J., & Haan.)					
145, 370	Stein, H., New York, assignor to self and H. Dale, Brooklyn, N. Y. Lock.	Dec. 9, 1873	297	100	4	622
134, 570	Stein, S., Rochester, N. Y. Burial-casket.	Jan. 7, 1873	64	20	3	12
141, 825	Steiner, J. H., Cincinnati, Ohio, assignor of one-half interest to L. Canady, Albany, N. Y. Fire-extinguisher.	Aug. 12, 1873	378	124	4	173
6, 536	Steinhilper, L., and L. Welker, Williamsport, Pa. Picture-frame. (Design).	Mar. 25, 1873			3	325
	Steinmetz, M. V. B. (<i>See</i> Bisel, J. J., assignor.)					
	Steinway, A., et al. (<i>See</i> Steinway, C. F. T., assignor.)					
135, 857	Steinway, C. F. T., assignor to self, W. and A. Steinway, New York, N. Y. Piano sounding-board.	Feb. 11, 1873	432	140	3	173
	Steinway, W., et al. (<i>See</i> Steinway, C. F. T., assignor.)					
144, 574	Stempel, A., Chicago, Ill. Process of painting signs on cloth.	Nov. 11, 1873	348		4	518
	Stenhouse, J. (<i>See</i> Thom & Stenhouse.)					
143, 729	Stensland, C., Negaunee, Mich. Machine-gun.	Oct. 14, 1873	310	102 } 103 }	4	413
141, 091	Stephens, A. P., Brooklyn, N. Y., assignor to The Stephens Patent Company, New York, N. Y. Broaching-machine.	July 22, 1873	689	232	4	93
	Stephens, C. B., et al. (<i>See</i> Hastings, G. S., assignor.)					
137, 500	Stephens, H., Saint Louis, Mo. Reservoir cooking-stove.	Apr. 1, 1873	205	62	3	373

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
142, 291	Stephens, H., assignor to J. Boyle, New York, N. Y. Awning-frame.....	Aug. 26, 1873	810	268	4	228
141, 472	Stephens, H. C., Glenville, Ohio. Seeding-machine.....	Aug. 5, 1873	57	17	4	139
	Stephens, M. (See Pearce, J., assignor.)					
5, 494	Stephens, M., Brooklyn, N. Y. Device for lining cement-pipes..... (Reissue)	July 15, 1873	596	200	4	76
137, 970	Same.....Cement-lined pipe.....	Apr. 15, 1873	627	197	3	432
142, 528	Same.....same.....	Sept. 2, 1873	184	60	4	256
143, 473	Same.....Machine for punching sheet-metal.....	Oct. 7, 1873	62	22	4	386
	Stephens Patent Company. (See Stephens, A. P., assignor.)					
144, 295	Stephens, W., Pittston, Pa. Slide-valve.....	Nov. 4, 1873	102	34	4	486
142, 052	Stephens, W. H., Evansville, and G. B. F. Cooper, New Albany, Ind. Rolling-mill.....	Aug. 19, 1873	595	196	4	200
137, 107	Stephenson, A. M., Manteno, Ill. Adding-machine.....	Mar. 25, 1873	688	229	3	330
	Stephenson, D. W. (See Stephenson, W. J. and D. W.)					
143, 730	Stephenson, G., Zionsville, Ind. Forceps for snouting hogs.....	Oct. 14, 1873	312	103	4	413
134, 615	Stephenson, J., New York, N. Y. Street-car coupling.....	Jan. 7, 1873	108	35	3	15
135, 170	Stephenson, W. H., Bluffton, Ind. Stove-pipe.....	Jan. 21, 1873	614	200	3	84
145, 251	Stephenson, W. J. and D. W., Yellow Springs, Ohio. Stove-pipe shelf.....	Dec. 2, 1873	191	66	4	600
136, 625	Stephenson, W. O., Marion County, Ind., assignor to self, H. C. Lord, and D. Ricketts. Car-chock for railroad rails.....	Mar. 11, 1873	259	87	3	275
134, 945	Sterick, S. T. F., assignor to W. M. King, Georgetown, D. C. Hub for vehicles.....	Jan. 14, 1873	412	132	3	53
130, 830	Sterick, S. T. F., Georgetown, D. C. Wheel for vehicles.....	June 10, 1873	364	113	3	654
144, 156	Sterling, D., Eaton Rapids, Mich. Hand shower-bath.....	Oct. 28, 1873	713	237	4	467
	Sterling, J. A. (See Plumb, W. H., assignor.)					
139, 031	Sterling, W. H., San Francisco, Cal. Railway-tie.....	May 20, 1873	511	161	3	562
142, 959	Same.....Process and composition for the manufacture of illuminating gas.....	Sept. 16, 1873	565		4	310
	Stern & Co. (See Weil, E., assignor.)					
142, 748	Sternberg, A. J., Butler, Ind. Bee-hive.....	Sept. 9, 1873	380	127	4	284
135, 171	Sternberger, L., Philadelphia, Pa. Starching-machine.....	Jan. 21, 1873	614	200	3	85
	Sterne, L. (See Jaques, Oakley & Sterne.)					
141, 826	Stetson, B., Fitchburgh, Mass. Water-wheel.....	Aug. 12, 1873	380	124	4	174
145, 819	Stevens, A. J., Sacramento, Cal. Locomotive-furnace.....	Dec. 23, 1873	707	233	4	679
5, 551	Stevens, C. A., New York, N. Y., assignor to I. D. Clift. Packing for journals and other parts of machinery..... (Reissue)	Aug. 26, 1873	839		4	230
141, 396	Stevens, C. and G. M., Boston, Mass. Fog-alarms.....	July 29, 1873	994	323	4	124
139, 032	Stevens, C. B., Donnellson, Iowa. Wheel-plow.....	May 20, 1873	512	162	3	562
	Stevens Company, J. and E. (See Frisbie, R., assignor.)					
145, 763	Stevens, E. M., Boston, Mass. Loom-shuttle guard.....	Dec. 23, 1873	665	217	4	675
145, 459	Stevens, G., and J. H. Watson, Tawas City, Mich. Plastering-machine.....	Dec. 9, 1873	373	124	4	627
137, 869	Stevens, G. J., Charlestown, Mass. Stilts.....	Apr. 15, 1873	541	169	3	425
	Stevens, G. M. (See Stevens, C. and G. M.)					
140, 853	Stevens, G. M., Portland, Me. Miter-box.....	July 15, 1873	454	154	4	64
137, 501	Stevens, G. W., San Francisco, Cal. Fruit-knife.....	Apr. 1, 1873	205	62	3	373
137, 502	Same.....Tray for drying fruit.....	Apr. 1, 1873	206	63	3	374
144, 877	Stevens, H., Brazoria, Tex. Manufacture of fertilizers.....	Nov. 25, 1873	622		4	562
137, 503	Stevens, H. B., assignor to G. L. Squier, Buffalo, N. Y. Metallic grinding-mill.....	Apr. 1, 1873	207	63	3	374
144, 803	Same.....Machine for separating rice.....	Nov. 18, 1873	546	186	4	545
145, 693	Same.....Machine for hulling rice.....	Dec. 16, 1873	589	193	4	657
137, 576	Stevens, H. C. and T. W., Enosburgh, Vt. Sugar-evaporator.....	Apr. 8, 1873	278	85	3	391
142, 820	Stevens, H. K., and S. Miller, said Miller assignor to said Stevens, Waterloo, N. Y. Screw-propeller.....	Sept. 16, 1873	448	151	4	300
	Stevens Company, J. and E. (See Frisbie, R., assignor.)..... (Design.)					
	Stevens, J. F. (See Freeman, Lowe & Stevens.)					
140, 797	Stevens, J. H., Cambridge, Mass. Water-closet.....	July 15, 1873	406	138	4	61
141, 179	Stevens, L., Washington, D. C. Gas-furnace.....	July 22, 1873	776	253	4	99
141, 180	Same.....same.....	July 22, 1873	777	254	4	99
141, 181	Same.....Furnace for roasting and smelting ores.....	July 22, 1873	778	255	4	99
144, 155	Stevens, M., Brooklyn, N. Y. Rotary shears for metal.....	Oct. 28, 1873	712	237	4	467
145, 764	Stevens, N. P., Hopkinton, N. H. Balanced valve for steam-engines.....	Dec. 23, 1873	666	217	4	675
	Stevens, Roberts & Havell. (See Havell, G., assignor.)					
136, 784	Stevens, S. M., assignor of half interest to S. W. Brunt, Lancaster, Iowa. Turbine water-wheel.....	Mar. 11, 1873	389	128	3	285
	Stevens, T. B., et al. (See Gifford, E. N., assignor.)					
145, 973	Stevens, W. F., Melrose, Mass. Hinge for safe-doors, &c.....	Dec. 20, 1873	869	281	4	702
142, 292	Stevens, W. J., New York, N. Y., assignor to self, D. S. Steele, and N. W. Condict, jr., Jersey City, N. J. Device for operating the valves of steam-engines.....	Aug. 26, 1873	811	268	4	228
139, 928	Stevens, W. X., East Brookfield, Mass. Dominos.....	June 17, 1873	459	143	3	669
138, 447	Stevenson, G., Zionsville, Ind. Corn-knife.....	Apr. 29, 1873	1,094	345	3	487
137, 971	Stevenson, G. B., Upper Sandusky, Ohio. Automatic gate.....	Apr. 15, 1873	628	198	3	432
137, 634	Stevenson, J., Sparta, Ill. Fruit-drier.....	Apr. 8, 1873	322	101	3	395
5, 341	Stevenson, J. E., New York, N. Y. Water-wheel..... (Reissue)	Mar. 25, 1873	854	279	3	343
	Stevenson, J. W. (See Fend & Stevenson.)			280		
136, 785	Stevenson, S., Dansville, N. Y. Horse hay-rake.....	Mar. 11, 1873	389	128	3	286
6, 737	Stevenson, W. S., assignor to Thomas, Roberts, Stevenson & Co., Philadelphia, Pa. Cooking-stove..... (Design)	July 1, 1873			4	7
140, 091	Stever, J., Bristol, assignor to T. C. Morton, Waterbury, Conn. Loom-picking mechanism.....	June 17, 1873	598	189	3	680
5, 526	Stewart, A., Chicago, Ill. Thread show-case..... (Reissue)	Aug. 5, 1873	194	61	4	151
144, 236	Stewart, A. J., Chillicothe, Mo. Harrow.....	Nov. 4, 1873	60	18	4	483
142, 180	Stewart, C., assignor of one-half interest to W. Allen, Worcester, Mass. Steam-boiler.....	Aug. 26, 1873	719	238	4	220
144, 002	Same.....Mouth-piece for steam-boiler furnaces.....	Oct. 28, 1873	587	195	4	456
145, 537	Same.....Mallet for driving tubes, &c.....	Dec. 16, 1873	461	151	4	646
136, 676	Stewart, E., Fort Madison, Iowa. Ruffling-attachment for sewing-machines.....	Mar. 11, 1873	300	100	3	278
	Stewart, E. C., executrix. (See Stewart, P. P.)..... (Extension.)					
138, 104	Stewart, E. P., Cotton Plant, Miss. Music notation.....	Apr. 22, 1873	763	242	3	453
138, 210	Stewart, G. W., assignor of three-fourths interest to J. A. Ansley and H. Lewis, Atlanta, Ga. Hay and cotton press.....	Apr. 22, 1873	855	271	3	460
5, 268	Stewart, H. S., Newark, N. J. Elevator..... (Reissue)	Feb. 4, 1873	217	67	3	144
141, 397	Stewart, J., jr., Yonkers, N. Y. Sewing-machine for banding hats.....	July 29, 1873	995	323	4	124
140, 315	Stewart, J., and W. Campbell, Fowler, Ill. Apple-paring, coring, and slicing machine.....	June 24, 1873	807	256	3	706
144, 237	Stewart, J. C., Eureka, Ill. Washing-machine.....	Nov. 4, 1873	61	19	4	483
140, 854	Stewart, J. F., Modesto, Cal. Windmill.....	July 15, 1873	455	154	4	65
136, 557	Stewart, J. L., and J. B. Dubler, Philadelphia, Pa. Oil-still.....	Mar. 4, 1873	185	59, 60	3	260
	Stewart, J. T. (See Hugg & Stewart.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 108	Stewart, J. T., Philadelphia, Pa. Tuck-creaser for sewing-machines.....	Mar. 25, 1873	689	229	3	330
136, 466	Stewart, L., San Francisco, Cal. Medicated towel.....	Mar. 4, 1873	98	.....	3	253
	Stewart, P. P., deceased, by E. C. Stewart, executrix, Troy, N. Y. Cooking-stove. (Ex- tension).....	Jan. 18, 1873	.....	.....	3	37
	Same.....Cooking-stove.....(Extension).....	Apr. 12, 1873	.....	.....	3	386
137, 804	Stewart, S. M., Rochester, N. Y. Combined raves and fenders for sleighs.....	Apr. 15, 1873	488	152	3	421
	Stewart, T. E. (See Eayrs, W. P., assignor.)					
145, 915	Stewart, W. A., Bethel, assignor of one-half interest to T. H. Dinsmore, Skowhegan, Me. Fog-signal.....	Dec. 23, 1873	794	260	4	685
144, 366	Stewart, W. H., Brooklyn, N. Y., assignor to self and A. Robinson, Morristown, N. J. Treadle for sewing-machines.....	Nov. 4, 1873	161	53, 54	4	491
	Stickler, Elliott, and Wilson. (See Smyth, D. M., assignor.)					
	Stickney, E. R. (See Longley & Stickney.)					
	Stiefvater, H. (See Lavies & Stiefvater.)					
140, 556	Stiff, W. C., Birmingham, England. Bale-tie.....	July 1, 1873	183	62	4	23
	Stiles and Parker Press Company. (See Stiles, N. C., assignor.)					
141, 182	Stiles, J. S., Springfield, Vt. Banjo.....	July 22, 1873	779	255	4	99
137, 331	Stiles, J. W., New York, N. Y. Pressure gage.....	Apr. 1, 1873	52	15	3	361
135, 380	Stiles, N. C., assignor to The Stiles and Parker Press Company, Middletown, Conn. Mode of adjusting the length of pitmen.....	Jan. 28, 1873	828	267	3	114
	Stiles, P. B. (See Collins & Stiles.)					
138, 541	Stiles, R., Cincinnati, Ohio. Scoop for raising sunken coal.....	May 6, 1873	64	22	3	503
137, 109	Stiles, W. C., Nevada City Cal. Rotary steam-engine.....	Mar. 25, 1873	690	229	3	330
138, 352	Same.....same.....	Apr. 29, 1873	1,010	318	3	481
137, 257	Stillman, E. C., Hopkinton, R. I., and E. F. Burrows, Mystic River, Conn. Tag-holder.....	Mar. 25, 1873	825	271	3	340
139, 275	Stillson, J. B., Chicago, Ill. Fire-extinguisher.....	May 27, 1873	757	239	3	590
141, 962	Stilwell, A., Dwaar's Kill, N. Y. Device for preventing horses from cribbing.....	Aug. 19, 1873	508	167	4	193
138, 706	Stimely, W. H., Buchanan, assignor of one-half interest to W. H. Doyle, Pittsburgh, Pa. Trace-detacher.....	May 6, 1873	211	67	3	514
136, 877	Stimens, E. P., and T. C. Martin, Perryville, assignors of half interest to A. Clark, Osna- burgh, Ohio. Hasp-lock.....	Mar. 18, 1873	477	158	3	302
138, 951	Stimpson, E. B., New York, N. Y. Machine for skiving leather.....	May 13, 1873	433	136	3	543
141, 398	Same.....Machinery for folding leather.....	July 29, 1873	996	{ 323 324 }	4	124
	Stimpson, E. S. (See Allen & Stimpson.)					
139, 929	Stimpson, E. S., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple.....	June 17, 1873	459	144	3	669
	Stimpson, J., Baldwinville, Mass. Machine for making box-joints.....(Extension).....	Nov. 8, 1873	.....	.....	4	504
143, 309	Stimson, A. L., Chicago, Ill. Metallic vault.....	Sept. 30, 1873	865	{ 296 297 }	4	361
140, 961	Stinde, H. F., Saint Louis, Mo. Seeding-machine.....	July 15, 1873	559	{ 187 188 }	4	73
145, 135	Stirling, W. B. C., and J. W. Pohlman, Batavia, Ohio. Carriage-top joint.....	Dec. 2, 1873	93	30	4	593
	Stiles, C. F. (See Walker, O. E., assignor.)					
140, 439	Stiles, C. F., Cincinnati, Ohio. Well-bucket.....	July 1, 1873	80	28	4	15
	Stiles, J. S. (See Morrison, E. R., assignor.)					
138, 707	Stith, H. T., Peoria, Kans. Traction-wheel.....	May 6, 1873	212	67	3	514
144, 575	St. John, C., New York, N. Y. Combined fan and parasol.....	Nov. 11, 1873	348	117	4	518
	St. John, L. E., et al. (See Palmer, G. N., assignor.)					
5, 679	St. John, M. W., Leonardsville, N. Y. Ball and socket joint.....(Reissue).....	Dec. 9, 1873	392	129	4	629
142, 293	Same.....same.....	Aug. 26, 1873	812	269	4	228
142, 258	St. John, W. H., New York, N. Y. Purification of illuminating-gas.....	Sept. 2, 1873	32	12	4	245
	Saint Louis Rail-Fastening Company. (See O'Conner, T., assignor.)					
	Saint Louis Railway Supplies Manufacturing Company. (See Tobey, E. H., assignor.)					
136, 275	St. Martin, W., Cincinnati, Ohio. Billiard-light.....	Feb. 25, 1873	819	{ 264 265 }	3	229
139, 434	Same.....Billiard-cushion.....	May 27, 1873	892	287	3	601
137, 391	Stock, C. A., New York, N. Y. Locking-device for a series of drawers.....	Apr. 1, 1873	101	33	3	365
	Stock, F. and J., San José, Cal. Pump-box.....(Extension).....	Apr. 26, 1873	.....	.....	3	444
	Stock, J. (See Rein & Stock.)					
	Stock, J. (See Stock, F. & J.).....(Extension).....					
	Stockley, G. W. (See Billings & Stockley.)					
135, 858	Stockmarr, T., New York, N. Y. Bustle.....	Feb. 11, 1873	433	141	3	173
137, 258	Same.....Fluting-machine.....	Mar. 25, 1873	826	271	3	340
137, 870	Stockstill, S. L., Medway, Ohio, and H. D. Kutz, Harrisburgh, Pa. Plow.....	Apr. 15, 1873	542	169	3	425
	Stockton, H. P. (See Inman, S., assignor.)					
	Stockton, J. C., et al. (See Chapman, J. L., assignor.)					
136, 276	Stockton, J. K., New York, N. Y. Sofa-bedstead.....	Feb. 25, 1873	820	265	3	229
138, 592	Same.....Wood-screw.....	May 6, 1873	110	35	3	506
	Stockton, V. (See Rogers, J. G., assignor.)					
	Stockton, W. D. (See McNeir & Stockton.)					
136, 786	Stockwell, A., Woonsocket, R. I. Loom-picking mechanism.....	Mar. 11, 1873	390	129	3	286
142, 529	Stockwell, E., Stamford, Conn. Permutation-lock.....	Sept. 2, 1873	185	61	4	257
140, 092	Stockwell, E., and W. H. Taylor, Stamford, Conn. Post-office box.....	June 17, 1873	599	189	3	680
143, 937	Stockwell, J. H., Bronson, Mich. Bee-hive.....	Oct. 21, 1873	503	170	4	439
137, 504	Stockwell, J. W., Portland, Me. Machine for operating drills.....	Apr. 1, 1873	208	63	3	374
140, 171	Same.....Mixing-machine.....	June 24, 1873	687	216	3	695
141, 244	Stockwell, L. W., Ravenna, Ohio. Device for holding gas-pipe nipples.....	July 29, 1873	849	277	4	113
140, 962	Stoddard, C. H., and E. D. Norton, Ithaca, N. Y. Feeding paper to printing presses.....	July 15, 1873	562	188	4	73
137, 577	Stoddard, C. T., Colebrook, N. H. Buggy.....	Apr. 8, 1873	279	85, 86	3	391
	Stoddard, J. C., Lockport, N. Y. Hay-spreader.....(Extension).....	June 28, 1873	.....	.....	3	690
24, 588	Same.....same.....(Disclaimer filed).....	July 1, 1873	.....	.....	4	7
145, 538	Stoddard, D., San Francisco, Cal. Condenser for steam-pumps.....	Dec. 16, 1873	462	151	4	646
144, 420	Stokes, J., jr., New York, N. Y. Ticket-case.....	Nov. 11, 1873	221	73	4	508
140, 316	Stoll, C., Brooklyn, N. Y. Machine for polishing malt.....	June 24, 1873	810	256	3	706
135, 381	Stoll, M. J., Middletown, Conn. Binder for sewing-machines.....	Jan. 28, 1873	829	267	3	114
140, 557	Same.....Ruffler for sewing-machines.....	July 1, 1873	184	62	4	23
6, 550	Stoll, N., Chicago, Ill. Billiard-table.....(Design).....	Apr. 1, 1873	.....	.....	3	357
143, 938	Stoll, W. W., Brooklyn, N. Y. Malt-steep.....	Oct. 21, 1873	504	170	4	439
145, 027	Same.....Malt-polishing apparatus.....	Nov. 25, 1873	747	252	4	573
138, 708	Stolpe, E. J. F., Washington, D. C. Button-fastening.....	May 6, 1873	214	67	3	515
143, 193	Stombs, J. H., Winona, Minn. Balanced valve.....	Sept. 23, 1873	759	262	4	336
144, 157	Same.....Self-adjusting telegraph-relay.....	Oct. 28, 1873	713	238	4	467
144, 367	Stone, C. S., Indianapolis, Ind. Harvester.....	Nov. 4, 1873	162	54	4	492
	Stone, E. (See Moody, W. F., assignor.)					
140, 855	Stone, H., Galveston, Tex. Combined spade and fork.....	July 15, 1873	456	155	4	65

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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	Stone, J. H. (See Aikin & Stone)..... (Reissue.)					
	Stone, J. H., et al. (See Davis, H. D., assignor.)					
	Same..... (See McGovern, P., assignor.)					
	Same..... (See Stone, J. M., assignor.)					
137, 972	Stone, J. H., Chapel Hill, Tex. Gate-hinge.....	Apr. 15, 1873	628	198	3	432
	Stone, J. M., et al. (See McGovern, P., assignor.)					
	Same..... (See Davis, H. D., assignor.)					
139, 930	Stone, J. M., assignor to self, G. L. Davis, J. A. Wiley, G. G. Davis, J. H. Stone, and J. H. Davis, North Andover, Mass. Spooling-machine.....	June 17, 1873	460	144	3	669
141, 296	Stone, J. M., North Andover, Mass. Shaft-coupling.....	July 29, 1873	895	294	4	117
135, 735	Stone, J. R., Round Grove, Kans. Stove-grate.....	Feb. 11, 1873	323	103	3	165
140, 093	Stone, J. W., Lynchburg, Va. Tobacco case.....	June 17, 1873	600	189	3	680
135, 382	Stone, M., Vermillion, Ohio. Self-waiting table.....	Jan. 28, 1873	829	267	3	114
139, 831	Same..... Ear cover.....	June 10, 1873	365	113	3	654
	Stone, W. F., et al. (See Hunter, G. W., assignor.)					
	Stone, W. N., et al. (See Bingham, S. H., assignor.)					
142, 053	Stone, W. S., New Philadelphia, Ohio. Mowing-machine.....	Aug. 19, 1873	597	196	4	200
138, 292	Stoner, J. B., New York, N. Y. Floating light-house.....	Apr. 29, 1873	957	{ 301 302 }	{ 3 3 }	{ 476 476 }
138, 293	Same..... same.....	Apr. 29, 1873	959	302	3	476
	Stoops, N. D. (See Bennor, J., assignor.)					
	Stoops, N. D., et al. (See Bennor, J., assignor.)					
	Same..... same..... (Reissue.)					
	Stoops, N. D. (See Cushman, C. S., assignor.)					
137, 635	Storck, H., and F. M. Lyte, Paris, France. Manufacture of acid phosphates.....	Apr. 8, 1873	323	.....	3	395
	Storer, A. (See Shawk & Storer.)					
	Storer, A., et al. (See Shawk, G. W., assignor.)					
141, 898	Storer, A., Cleveland, Ohio. Electric annunciator.....	Aug. 19, 1873	459	149	4	189
139, 625	Storer, G. W., Philadelphia, Pa. Evaporating-pan.....	June 3, 1873	156	52	3	621
140, 963	Same..... Driven-well.....	July 15, 1873	563	188	4	73
143, 939	Same..... Evaporating-pan.....	Oct. 21, 1873	505	170	4	439
144, 158	Same..... same.....	Oct. 28, 1873	714	238	4	467
144, 159	Same..... Evaporating pan and plant for salt-manufacture.....	Oct. 28, 1873	716	{ 238 239 }	{ 4 4 }	{ 467 467 }
5, 703	Storer, J. J., Boston, Mass. Process and apparatus for deodorizing and destroying the gases from offal-treating establishments..... (Reissue.)	Dec. 23, 1873	817	267	4	687
135, 383	Same..... Treating offal and manufacturing fertilizers.....	Jan. 28, 1873	830	268	3	114
136, 943	Same..... Treating offal and manufacture of fertilizers.....	Mar. 18, 1873	533	176	3	306
143, 310	Same..... Fertilizer from offal.....	Sept. 30, 1873	867	.....	4	361
	Stork, W. L., et al. (See Bushfield, S. B., assignor.)..... (Reissue.)					
139, 626	Storle, O. O., assignor to self and W. Johnson, Milwaukee, Wis. Clasp for securing the ends of leather straps.....	June 3, 1873	156	52	3	622
	Storms, A. (See McKnight, J. J., assignor.)					
138, 822	Story, A. G., Waterloo, N. Y. Pipe or car couplings.....	May 13, 1873	325	100	3	534
139, 435	Stott, J., Norwich, Conn. Lid-supporter for trunk.....	May 27, 1873	893	288	3	601
137, 036	Stouffer, H. C., Canfield, Ohio. Earth-auger.....	Mar. 18, 1873	613	203	3	313
138, 211	Same..... Horse hay-fork.....	Apr. 22, 1873	857	271	3	460
141, 297	Stough, C. B., Monticello, Ill. Hoisting and conveying apparatus.....	July 29, 1873	895	294	4	117
139, 931	Stout, C., assignor to self and C. Rorer, Waverly Heights, Pa. Clamping-device.....	June 17, 1873	461	144	3	669
	Stout, F. A. (See Staats, R. P., assignor.)					
141, 183	Stout, P. F., assignor of one-half interest to W. C. Roberts, Philadelphia, Pa. Locomotive head-light.....	July 22, 1873	780	255	4	99
139, 627	Stout, S., Tremont, Ill. Spring-bed.....	June 3, 1873	157	52	3	622
145, 765	Stover, D. C., Freeport, Ill. Windmill-regulator.....	Dec. 23, 1873	666	217	4	675
137, 973	Stow, H. M., San Francisco, Cal. Wood pavement.....	Apr. 15, 1873	629	198	3	432
140, 657	Stow, H. M., Milan, Ohio. Sawing-machine.....	July 8, 1873	283	96	4	43
136, 558	Stow, N., Binghamton, N. Y. Shears for counters.....	Mar. 4, 1873	186	60	3	260
141, 399	Stow, N. C., Rockland, Me. Shoe-edge burnishing-machine.....	July 29, 1873	998	324	4	124
144, 238	Stow, O. W., Plantsville, Conn. Paper bag.....	Nov. 4, 1873	62	19	4	483
5, 462	Stowe, A. F., Worcester, Mass. Strap-machine..... (Reissue.)	June 24, 1873	836	265	3	708
139, 744	Same..... Leather-splitting machine.....	June 10, 1873	288	89	3	648
144, 931	Stowe, F., Huron, Ohio. Door-latch.....	Nov. 25, 1873	663	225	4	566
141, 827	Stowe, S. F., assignor of one-half interest to S. G. Trippe, Providence, R. I. Windmill.....	Aug. 12, 1873	381	125	4	174
	Stowe, T. (See Sears, W. H., assignor.)					
136, 944	Stowell, J. M., Milwaukee, Wis. Machine for sawing laths.....	Mar. 18, 1873	534	177	3	306
142, 294	Same..... Sawing-machine.....	Aug. 26, 1873	813	269	4	228
134, 571	Stowell, W. J., Baltimore, Md. Fastening mail-bags.....	Jan. 7, 1873	65	20	3	12
	Saint Paul Harvester-Works. (See Elward, J. H., assignor.)					
	St. Pierre, P. (See Luppert & St. Pierre.)					
144, 038	St. Pierre, X., Ophir City, Utah Territory. Car-coupling.....	Oct. 28, 1873	616	204	4	459
	Strader, J. J., et al. (See Clarkson, F. E., assignor.)					
135, 859	Strahl, J., Lee, Ohio. Washing-machine.....	Feb. 11, 1873	433	141	3	173
145, 371	Strain, A., Greenfield, Ohio. Car-coupling.....	Dec. 9, 1873	297	100	4	622
	Strain, P. J. (See Twamly, J., assignor.)					
136, 677	Strait, J. V., Litchfield, Ohio. Traction-wheel.....	Mar. 11, 1873	301	100	3	278
137, 805	Stranahan, J. L., Chicago, Ill. Broom-corn duster.....	Apr. 15, 1873	489	153	3	421
142, 181	Strange, F., Detroit, Mich. Low-water indicator and alarm.....	Aug. 26, 1873	720	238	4	230
139, 033	Strange, J. W., Bangor, Me. Rotary valve and cut-off.....	May 20, 1873	513	162	3	563
139, 628	Strasser, W., assignor to self and S. S. Baughman, Taylorsville, Ohio. Skate.....	June 3, 1873	157	53	3	622
140, 964	Strasser, W., Taylorsville, Ohio, assignor to self and S. S. Baughman, Muskingum County, Ohio. Mode of uniting boot and shoe soles to the uppers.....	July 15, 1873	563	188	4	73
135, 018	Strässle, B., Chicago, Ill. Parlor swing.....	Jan. 21, 1873	492	158	3	75
145, 974	Straszer, G., assignor of one-half interest to H. McNeill, Manchester, Mo. Shirt-collar fastening.....	Dec. 30, 1873	870	282	4	702
141, 673	Straszer, J., Saint Louis, Mo. Wick-raiser.....	Aug. 12, 1873	247	78	4	163
141, 828	Strattan, A. M., Ladoga, Ind. Crozing and chamfering plane.....	Aug. 12, 1873	383	125	4	174
138, 952	Strattner, F., Wilmington, Del. Tire-heater.....	May 13, 1873	434	136	3	543
135, 860	Stratton, H., assignor to Bradley & Hubbard, West Meriden, Conn. Call-bell.....	Feb. 11, 1873	434	141	3	173
	Stratton, O. G. (See Noyes & Stratton.)					
138, 593	Straub, I., Kenton County, Kentucky. Wind-wheel power.....	May 6, 1873	110	36	3	507
	Straub Mill Company. (See Cathcart, R. S., assignor.)					
5, 609	Straus, J., Saint Louis, Mo. Side-saddle tree..... (Reissue.)	Oct. 14, 1873	335	111	4	415
139, 524	Same..... Back-band hook.....	June 3, 1873	68	23	3	614
	Strauss, L. & Co. (See Davis, J. W., assignor.)					

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 823	Strawn, T. C., and W. C. Drum, Perry Township, assignor to Speer, Clarke & Co., Pittsburgh, Pa. Rotary sieve.	May 13, 1873	326	101	3	534
142, 054	Street, E. A., South Orange, N. J. Manufacture of hydraulic hose.	Aug. 19, 1873	597	196	4	200
144, 368	Streeter, N. R., Groton, N. Y. Last-block fastener.	Nov. 4, 1873	163	54	4	492
145, 028	Same. (See Taber, W. D., assignor.)	Nov. 25, 1873	748	253	4	573
136, 878	Streeter, S. F., Bernardston, Mass. Trowel.	Mar. 18, 1873	478	158	3	302
145, 252	Streeter, S. F., Greenfield, Mass. Tool-handle.	Dec. 2, 1873	192	66	4	600
142, 295	Strehli, J. H., Cincinnati, Ohio. Steam-engine.	Aug. 26, 1873	815	269	4	228
143, 859	Streightoff, C. H., New York, N. Y. Pen and pencil-case.	Oct. 21, 1873	443	147	4	434
137, 505	Streit, C., Cincinnati, Ohio. Sofa bedstead.	Apr. 1, 1873	210	64	3	374
	Striber, E., et al. (See Bedell, O. T., assignor.) (Reissue.)					
	Same. (See Taber, W. D., assignor.) (Reissue.)					
144, 296	Stribling, U. B., Madison, Ind. Furnace for steam-boilers.	Nov. 4, 1873	103	35	4	486
142, 296	Strickler, J., Columbiana, Ohio, assignor to W. W. Wallace, Pittsburgh, Pa. Boring-machine.	Aug. 26, 1873	815	270	4	228
143, 194	Striker, G. W., Iowa Falls, Iowa. Bag-holder.	Sept. 23, 1873	760	262	4	337
	Strobridge & Co. (See Wolff, O. P., assignor.)					
140, 558	Strobridge, L. H., Naples, N. Y. Washing-machine.	July 1, 1873	185	63	4	23
144, 804	Strode, R., Coatesville, Pa. Safety-platform for railway-cars.	Nov. 18, 1873	549	186	4	546
141, 829	Strong, A. D., Ashtabula, Ohio. Blacking for leather.	Aug. 12, 1873	383		4	174
5, 374	Strong, C., Winsted, Conn. Coffin-handle. (Reissue.)	Apr. 22, 1873	886	279	3	462
138, 768	Same. (See Taber, W. D., assignor.)	May 13, 1873	280	87	3	536
	Strong, F. M., Vergennes, and T. Ross, Rutland, Vt. Platform scales. (Extension.)	May 24, 1873			3	558
	Same. Weighing-scales. (Extension.)	Aug. 16, 1873			4	159
141, 899	Strong, H. N., Portland, Conn. Hook for hanging tobacco.	Aug. 19, 1873	459	150	4	189
141, 900	Strong, J. E., Newton Brook, Canada. Automatic gate.	Aug. 19, 1873	460	150	4	189
146, 030	Strong, W. H., Clinton Township, Ohio. Wheel-cultivator.	Dec. 30, 1873	915	297	4	706
141, 143	Stroud, G. F., assignor to W. D. Stroud, Oshkosh, Wis. Seeding-machine.	July 22, 1873	736	244	4	96
141, 400	Same. Cultivator-teeth.	July 29, 1873	998	324	4	124
	Stroud, W. D. (See Stroud, G. F., assignor.)					
136, 107	Strowbridge, J. W., Cortland, N. Y. Seeding-machine.	Feb. 18, 1873	659	215	3	205
138, 953	Strunz, S., Birmingham, Pa. Soap-crutching machine.	May 13, 1873	435	136	3	543
138, 954	Strunz, S., Pittsburgh, Pa. Disinfecting soap-boiling establishments.	May 13, 1873	435	137	3	543
143, 541	Stryker, W. H., Syracuse, N. Y. Stove-grate.	Oct. 7, 1873	123	41	4	390
139, 206	Stuart, A. A., Cedar Rapids, Iowa. Door-bell.	May 20, 1873	678	213	3	576
145, 253	Stuart, D., and L. Bridge, assignors to Stuart, Peterson & Co., Philadelphia, Pa. Stove-grate.	Dec. 2, 1873	193	66	4	600
140, 390	Stuart, L. W., Hawley, Pa., assignor to G. Ames, Rochester, N. Y. Process of hardening edge-tools.	July 1, 1873	46		4	12
	Stuart, Peterson & Co. (See Stuart & Bridge, assignors.)					
137, 156	Stuart, R. J., Yonkers, N. Y. Printing-press feeder.	Mar. 25, 1873	728	242	3	333
144, 160	Same. Paper-folding machine.	Oct. 28, 1873	717	{ 239 } { 240 }	{ 4 }	467
	Stuart, T. E. (See Eayrs, W. P., assignor.)					
	Stuart, W. (See Lobdell, G. G., assignor.)					
140, 227	Stubbings, M. J., Youngstown, Ohio. Combined scissors and tape-line.	June 24, 1873	731	230	3	699
143, 102	Same. Coffee-pot.	Sept. 23, 1873	689	237	4	330
142, 960	Stubbs, H. J., Kennett Square, Pa. Thill-coupling attachment.	Sept. 16, 1873	567	192	4	311
136, 277	Stubbs, J. W., Cheraw, S. C. Fertilizer.	Feb. 25, 1873	821	265	3	229
136, 787	Stuckman, H., Bourbon Township, Ind. Washing-machine.	Mar. 11, 1873	391	129	3	286
	Studer, J. A. (See Martin & Studer.)					
146, 031	Stull, H., Ione City, Cal. Process for the reduction of copper and other ores.	Dec. 30, 1873	916		4	706
135, 294	Stults, S. S., Cedar Bluffs, Nebr. Hand-planter.	Jan. 28, 1873	748	241	3	108
143, 940	Sturdevant, A. T., Mount Pleasant, N. Y. Manufacture of paper stock.	Oct. 21, 1873	506	171	4	440
	Sturgeon, I. H. (See Hull & Brown, assignors.)					
	Sturges, F., & Co. (See Mather, E., assignor.)					
139, 276	Sturges, G. A., assignor to self and D. Pettengill, Delhi, N. Y. Railway rail-joint.	May 27, 1873	758	{ 239 } { 240 }	{ 3 }	590
141, 184	Same. Sash-holder.	July 22, 1873	781	255	4	99
143, 790	Same. Railway rail-joint fastening.	Oct. 21, 1873	382	127	4	429
134, 946	Sturgis, J., Minneapolis, Minn. Two-horse evener.	Jan. 14, 1873	413	132	3	53
135, 384	Sturgis, J. I., Milwaukee, Wis. Printer's lead-casting machine.	Jan. 28, 1873	831	268	3	114
	Sturtevant, B. F., West Roxbury, Mass. Blank for shoe-pegs. (Extension.)	Aug. 16, 1873			4	159
	Same. Lathe attachment for cutting veneers. (Extension.)	Dec. 27, 1873			4	671
26, 627	Same. (See Taber, W. D., assignor.) (Disclaimer filed.)	Dec. 26, 1873			4	671
144, 421	Sturtevant, S. C., Cleveland, Ohio. Bridge-wall for furnaces.	Nov. 11, 1873	222	74	4	508
137, 332	Sturtevant, T. L., Framingham, Mass. Powder-flask.	Apr. 1, 1873	53	16	3	361
138, 294	Same. Machine for loading cartridges.	Apr. 29, 1873	962	302	3	477
141, 185	Same. Device for loading cartridges.	July 22, 1873	782	256	4	100
143, 427	Stützel, F., Wabashaw, Minn. Medical compound or stomach-bitters.	Oct. 7, 1873	29		4	383
143, 474	Subit, P., Boston, Mass. Belt-fastening.	Oct. 7, 1873	63	22	4	386
136, 011	Succoss, J. R., assignor of two-thirds interest to J. Krein and W. Succoss, Birmingham, Pa. Car-coupling.	Feb. 18, 1873	573	189	3	198
	Succoss, W., et al. (See Succoss, J. R., assignor.)					
138, 105	Suggs, L. T., Green Hill, Tex. Seed-planter.	Apr. 22, 1873	763	243	3	453
142, 961	Suitt, J. B., Indianapolis, Ind. Thrashing-machine.	Sept. 16, 1873	568	192	4	311
	Sullenberger, W. H. (See Bird & Sullenberger.)					
	Sullivan, D. (See Bordner & Sullivan.)					
139, 207	Sullivan, D., Washington, D. C. Apparatus for treating horses.	May 20, 1873	679	213	3	576
140, 658	Sullivan, J., and J. Minks, Newark, Ind. Band-cutter and feeder for thrashing-machines.	July 8, 1873	283	96	4	43
	Sullivan Machine Company. (See Ball, A., assignor.)					
	Sully, J., trustee. (See Baldwin, J. F., assignor.)					
	Same. (See Hardy, C. F., assignor.)					
	Same. (See Smith, H., assignor.)					
142, 055	Summers, W. D., Hopkinsville, Ky. Harrow.	Aug. 19, 1873	598	197	4	200
140, 599	Summit, P., Marlborough, Mass. Hand peg-cutter.	July 8, 1873	235	80	4	39
135, 606	Sumption, E., South Bend, Ind. Ironing apparatus.	Feb. 4, 1873	203	63	3	143
	Sundermann, J. H. (See Matson, M., assignor.)					
137, 110	Sunter, H. J., Buffalo, N. Y. Method of heating photographic negative baths.	Mar. 25, 1873	691	230	3	330
	Sursa, J. W. (See Wright & Sursa.)					
5, 375	Sutcliffe, E. A., New York, N. Y. Breech-loading ordnance. (Reissue.)	Apr. 22, 1873	887	279	3	462
145, 766	Sutherland, A. J., Ann Arbor, Mich. Machine for shaping pickets.	Dec. 23, 1873	667	218	4	676
135, 232	Sutherland, S. F., Baltimore, Md. Process for treating lamp-wicks.	Jan. 28, 1873	716		3	105
135, 861	Sutherland, B. W., Fillmore, Minn. Three-horse evener.	Feb. 11, 1873	434	141	3	173
137, 733	Sutor, W. B., Indiana, Pa. Grate for stoves and fire-places.	Apr. 8, 1873	416	128	3	402
6, 650	Sutro, L., New York, N. Y. Ruffle-stand. (Design.)	May 13, 1873			3	527

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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144, 039	Sutter, J. D., Chicago, Ill. Apparatus for extinguishing fires in buildings.	Oct. 28, 1873	617	204	4	459
140, 440	Sutton, F. R. and W. O., Wellington, Ill. Thrashing-machine	July 1, 1873	81	28	4	15
141, 298	Same.....Harvester-cutter	July 29, 1873	897	294	4	117
137, 974	Sutton, J., New York, N. Y. Bread-raising apparatus.	Apr. 15, 1873	630	198	3	433
136, 879	Sutton, J. M., Sutton's Corners, Pa. Car-coupling	Mar. 18, 1873	478	159	3	302
136, 342	Sutton, L. B., Windsor, N. C. Cotton-seed planter	Feb. 25, 1873	877	283	3	234
	Sutton, W. O. (See Sutton, F. R. and W. O.)					
145, 916	Suydam, C. V. N., Millstone, N. J. Spring-brace for vehicles	Dec. 23, 1873	796	261	4	685
138, 448	Svedberg, J. A., Washington, D. C. Rotary blower	Apr. 29, 1873	1,094	346	3	487
140, 965	Svensen, C., Blair, Nebr. Potato-planter	July 15, 1873	564	189	4	73
143, 941	Svensen, C., Blair, Nebr. Harrow	Oct. 21, 1873	507	171	4	440
142, 056	Swain, D., Dover, N. H. Tile-roofing	Aug. 19, 1873	599	197	4	200
140, 600	Swain, E., Chelmsford, Mass. Shaft-coupling	July 8, 1873	236	80	4	39
	Swain, Fuller & Co. (See Johnson, J. B., assignor.)					
	Swamscot Machine Company. (See Rundlett, G. B., assignor.)					
142, 057	Swan, A. L., Cherry Valley, N. Y. Bell-pull	Aug. 19, 1873	599	197	4	200
141, 963	Swan, G. W., San Francisco, Cal. Veneer-keg	Aug. 19, 1873	509	168	4	193
142, 297	Same.....Machine for making boxes	Aug. 26, 1873	816	270	4	228
142, 298	Same.....Process for softening and toughening blocks of wood	Aug. 26, 1873	817		4	228
143, 103	Same.....Box-former	Sept. 23, 1873	689	237	4	330
142, 299	Swan, G. W., and W. Finch, said Finch assignor to said Swan, San Francisco, Cal. Fruit and berry basket.	Aug. 26, 1873	817	270	4	228
5, 624	Swan, J., Seymour, Conn., assignor to R. P. Bruff. Machine for manufacturing auger-bits.	Oct. 21, 1873	534	176	4	442
	(Reissue.)					
139, 091	Swan, J., Seymour, Conn. Machine for turning the lips of augers	May 20, 1873	570	179	3	567
141, 401	Same.....Machine for forming auger-bits	July 29, 1873	999	324	4	124
143, 475	Swan, J., Richmond, Ohio. Pitman	Oct. 7, 1873	64	22	4	386
135, 451	Swank, J., Delano, Pa. Ratchet-drill	Feb. 4, 1873	55	18	3	132
	Swann, J. B. (See Atkins, I., assignor.)					
6, 946	Swann, T., Philadelphia, Pa. Toy-bank	Oct. 7, 1873			4	380
	(Design.)					
145, 694	Swanson, C., Newton, Iowa. Combined punching and shearing-machine	Dec. 16, 1873	591	193	4	657
137, 111	Swartz, G. A., Twin Grove, Wis. Windmill	Mar. 25, 1873	692	230	3	330
136, 278	Swartz, S., Buffalo, N. Y. Lifting bridge	Feb. 25, 1873	822	265 266	3	229
	Sweatt, L. A. (See Lombard, Morrill & Sweatt.)					
137, 734	Sweeney, H. M., assignor of one-half interest to O. N. Pond, Worcester, Mass. Fertilizing-distributor	Apr. 8, 1873	416	128	3	402
	Sweeney, J. J. (See Smith, J. T. and G. M., and Sweeney.)					
	Sweeney, N. D. (See Ground, R. B., assignor.)					
	Sweeney, T. (See Hawson & Sweeney)				3	389
137, 975	Sweeney, W. P., Marine, Ill. Wheel-plow	Apr. 15, 1873	641	199	3	433
	Sweet, Barnes & Co. (See Deering, M., assignor.)					
143, 731	Sweet, B. B., Wilmington, Del., and J. Noble, Philadelphia, Pa. Snow-plow	Oct. 14, 1873	312	103	4	414
5, 311	Sweet, F. M., Newark, N. J., assignor to D. D. and A. E. Coddling, and T. I. Smith. Brace-let	Mar. 4, 1873	213	70	3	262
	(Reissue.)					
140, 094	Sweet, G., Dansville, N. Y. Wheelwright-machine	June 17, 1873	601	189	3	681
140, 317	Same.....Plaster-sower	June 24, 1873	811	256	3	706
145, 029	Same.....Horse-hay rake	Nov. 25, 1873	749	253	4	573
139, 932	Sweetland, A. C., North Attleborough, Mass. Stove-pipe joint	June 17, 1873	462	144	3	669
141, 830	Same.....Pipe-coupling	Aug. 12, 1873	384	126	4	174
	Sweetland, J. B. (See Thompson & Rice, assignors.)					
135, 862	Sweetland, J. B., Pontiac, Mich. Sectional steam-generator	Feb. 11, 1873	435	142	3	173
136, 788	Same.....Wash-bench for wringing-machines	Mar. 11, 1873	392	129	3	286
139, 208	Same.....Churn-motor	May 20, 1873	680	213	3	573
144, 161	Same.....Elevator	Oct. 28, 1873	719	240	4	467
146, 106	Same.....Nut-lock	Dec. 30, 1873	985	318	4	711
	Sweetser, W. A. (See Merritt, I., assignor.)					
139, 209	Swenson, G., Hackensack, N. J. Safety-valve	May 20, 1873	680	214	3	576
140, 441	Same.....Saw-set	July 1, 1873	81	29	4	15
144, 932	Swenson, G., assignor to self and P. Bogart, jr., Hackensack, N. J. Spark-arrester	Nov. 25, 1873	663	225	4	566
139, 832	Swett, C., Copiah County, Miss., assignor to C. Swett and W. Palfry, New Orleans, La. Fire-tongs	June 10, 1873	366	113	3	654
	Swezey, H. W., et al. (See Lee, G. D., assignor.)					
136, 108	Swickard, J. W., assignor of one-half interest to J. Hough, Galva, Illinois. Cultivator	Feb. 18, 1873	660	216	3	205
	Swift, C. (See Moody, W. F., assignor.)					
143, 791	Swineford, P., Middleburgh, Pa. Car-coupling	Oct. 21, 1873	383	127	4	429
137, 392	Swingle, A., assignor to self and F. A. Huntingdon, San Francisco, Cal. Magazine-gun	Apr. 1, 1873	101	33	3	365
138, 542	Swingle, A., San Francisco, Cal. Combined shears and button-hole cutters	May 6, 1873	65	22	3	503
135, 947	Swingle, A., and F. A. Huntington, San Francisco, Cal. Magazine fire-arm	Feb. 18, 1873	520	170	3	194
136, 880	Switzer, J. J., Boston, Mass. Loom-stop mechanism	Mar. 18, 1873	479	159	3	302
145, 917	Switzer, W. L., Zanesville, Ohio. Connecting-rod	Dec. 23, 1873	797	261	4	685
135, 863	Swofford, J. P., Brownville, Miss. Scraper-attachment for plows	Feb. 11, 1873	436	142	3	173
136, 279	Swope, Z., Lancaster, Pa. Harvester	Feb. 25, 1873	823	266	3	230
143, 542	Sykes, H., New York, N. Y. Awning	Oct. 7, 1873	124	42	4	391
143, 428	Sykes, S., Portland, Oreg. Device for detaching horses	Oct. 7, 1873	29	11	4	383
	Sykes, W. R. (See Clark & Sykes.)					
138, 709	Sylvester, G. W., Plain View, Minn. Coupling-joint for reapers	May 6, 1873	215	67	3	515
143, 195	Same.....Coupling-joint for reapers, &c.	Sept. 23, 1873	761	262	4	337
137, 571	Sylvester, H., Saint Louis, Mo. Felly-plate	Apr. 8, 1873	273	84	3	390
141, 092	Symonds, C. E., Salem, Mass. Grafting	July 22, 1873	690	232	4	93
136, 187	Symonds, T., Portland, Me. Dredger	Feb. 25, 1873	745	240	3	223
138, 054	Same.....Curtain-fixture	Apr. 22, 1873	723	229	3	449
138, 295	Same.....Dredger	Apr. 29, 1873	964	303	3	447
	Taber, G. R. (See Roby, J. B., assignor.)					
138, 296	Taber, J., South Wolfborough, N. H. Washing-machine	Apr. 29, 1873	965	303	3	477
140, 442	Taber, J., Rockford, Mich. Dog for circular-saw mills	July 1, 1873	83	29	4	15
	Taber, W. D., et al. (See Bedell, O. T., assignor.)					
	(Reissue.)					
	Taber, W. D. (See Goodwin, S. A., assignor.)					
5, 300	Taber, W. D., Buffalo, N. Y., assignor of one-half interest to P. P. Josef and E. Striber. Egg-carrier	Feb. 25, 1873	897	288	3	235
	(Reissue.)					
141, 040	Tadlock, J. S., assignor to self and J. M. Howell, Belmont, Tex. Horse-power	Oct. 28, 1873	617	204	4	459
139, 340	Taft, D. F., New Bedford, Mass. Corn-planter	May 27, 1873	804	256	3	591
5, 417	Taft, G. C., Worcester, Mass. Letter-copying press	May 20, 1873	701	220	3	578
145, 975	Same.....Nail-extractor	Dec. 30, 1873	870	282	4	702

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
140, 740	Taft, G. E., assignor to Whitin Machine Works, Whitinsville, Mass. Traversing-cam for card-stripping machines	July 8, 1873	353	{ 118 119 120 }	4	48
144, 162	Taft, J. C., Pawtucket, R. I. Stopping-mechanism for drawing-frames	Oct. 28, 1873	720	240	4	467
144, 576	Tage, C., Philadelphia, Pa. Dress-elevator	Nov. 11, 1873	349	118	4	518
145, 539	Taggart, J., assignor to J. A. Seney, Boston, Mass. Machine for splitting whalebone or rattan	Dec. 16, 1873	463	151	4	647
24, 963	Taggart, S., Indianapolis, Ind. Flour-packer. (Extension)	Aug. 2, 1873			4	84
146, 107	Same. same. (Disclaimer filed)	July 19, 1873			4	85
136, 012	Talbott, S., jr. (See Barnes, W. B., assignor.)	Dec. 30, 1873	986	318	4	711
140, 172	Tallbouis, E., and A. Renevey, Saint Just-en-Chaussée, France, assignors to J. Freeman, Windsor Locks, Conn. Knitting-machine	Feb. 18, 1873	574	{ 189 190 }	3	198
	Taine, M., South Boston, Mass. Pantaloon-tree	June 24, 1873	688	216	3	696
	Tainter, W. V. (See Chandler & Tainter.)					
144, 577	Taisey, J. (See Morrison, R. H. D., assignor.)					
	Tait, A. H., Jersey City, N. J. Apparatus for the manufacture of ice, cooling buildings, &c	Nov. 11, 1873	350	118	4	518
145, 460	Same. Cleansing sugar from molasses, &c	Dec. 9, 1873	374		4	628
135, 673	Tait, A. H., Jersey City, N. J., and J. W. Avis, Matteawan, N. Y., said Tait assignor to said Avis. Still for petroleum and other liquids	Feb. 11, 1873	271	85	3	161
	Talbot, S., jr. (See Barnes, W. B., assignor.)					
138, 710	Tall, J., Southwark, England. Construction of buildings	May 6, 1873	215	68	3	515
146, 032	Tallmadge, J. W., Boston, Mass. Broom-corn-seed flour, for the manufacture of paste	Dec. 30, 1873	916		4	706
144, 485	Talmage, J. O., Cardington, Ohio. Hand corn-planter	Nov. 11, 1873	272	92	4	512
139, 484	Talpey, J. A., Somerville, assignor to J. Hitchcock, trustee, Boston, Mass. Fire-escape	June 3, 1873	37	12	3	612
141, 093	Same. same	July 22, 1873	690	232	4	93
138, 449	Taltavull, P., assignor to self and E. M. Boteler, Washington, D. C. Corpse-preserver	Apr. 29, 1873	1,097	346	3	458
136, 678	Tamin, J. M. O., New York, N. Y. Medical compounds and medicated food	Mar. 11, 1873	302		3	278
141, 831	Same. Purifying sugar, molasses, and saccharine juices	Aug. 12, 1873	385		4	174
141, 832	Same. Manufacture of chocolate	Aug. 12, 1873	386		4	174
142, 058	Tamkins, J., sr., Conklin, N. Y. Market-wagon	Aug. 19, 1873	600	197	4	200
138, 055	Tamplin, B. V., Peoria, Ill. Implements for rolling, guiding, and controlling barrels, &c	Apr. 22, 1873	724	229	3	449
5, 682	Taney, J., Bangor, Me. Water-wheel. (Reissue)	Dec. 9, 1873	396	130	4	629
143, 040	Same. same	Sept. 23, 1873	641	220	4	326
5, 552	Tangeman, W. A., Lockland, Ohio. Knitting-machine. (Reissue)	Aug. 26, 1873	839	278	4	230
	Tanite Company. (See Cole, J. M., assignor.) (Four cases.)					
140, 559	Tanner, B., New Brighton, England. Manufacture of superphosphate of lime	July 1, 1873	186		4	23
138, 955	Tanner, E. B., Attica, Ohio. Hay-carrier	May 13, 1873	436	137	3	544
141, 607	Tapley, D. J., Danvers, Mass. Fire-extinguisher	Aug. 5, 1873	172	55	4	149
	Tapley Heel-Burnishing Association. (See Beasley, J., assignor.)					
	Tapley Heel-Burnishing-Machine Association. (See Lambert, R. C., assignor.)					
137, 735	Tappan, W. S., Washington, D. C. Suspension-hook for eye-glasses	Apr. 8, 1873	417	128	3	402
136, 280	Tappey, Lumsden & Co. (See Rash, R. A., assignor.)					
136, 188	Tarbell, M. W., and J. H. P. Inslee, Jersey City, N. J. Crib-attachment for bedsteads	Feb. 25, 1873	824	266	3	230
142, 821	Tarble, F. W., Charlestown, and H. W. Sawyer, Chelsea, Mass. Knife-polisher	Feb. 25, 1873	746	240	3	223
5, 487	Tarr, J. B., Fairhaven, Mass. Mold for casting car-wheels	Sept. 16, 1873	449	152	4	301
	Tarrant, E., assignor to A. Rodgers, Muskegon, Mich. Machine for turning logs. (Reissue)	July 15, 1873	590	199	4	75
5, 536	Tarrant, E., Muskegon, Mich. Sawing-machine for edging lumber. (Reissue)	Aug. 19, 1873	613	202	4	202
141, 736	Same. Log-turner	Aug. 12, 1873	297	97	4	167
139, 210	Tarrant, F., Saratoga Springs, N. Y. Stove-pipe thimble	May 20, 1873	681	214	3	576
139, 341	Tarring, L., Washington, D. C. Book-rest	May 27, 1873	805	257	3	594
138, 728	Tarring, L. A., Washington, D. C. Book-rest for desks	May 6, 1873	235	73	3	516
	Tartiere, L. A. (See Kreisler & Tartiere.)					
	Same. (See Van Zandt & Tartiere.)					
138, 956	Tartiere, L. A., New York, N. Y. Fire and water proof compositions for ceilings, walls, and floors	May 13, 1873	437		3	544
143, 196	Same. Fire-proof building	Sept. 23, 1873	761	263	4	337
143, 197	Same. same	Sept. 23, 1873	762	263	4	337
136, 674	Tasker, S. P. M., Philadelphia, Pa. Furnace for heating metallic bars, tubes, &c	Feb. 11, 1873	273	86	3	161
137, 259	Tasker, S. P. M., and W. H. McMillan, assignors to Morris Tasker & Co., Philadelphia, Pa. Weighted gage cock	Mar. 25, 1873	826	272	3	340
	Tate, S. T. (See Van Houten, E. F., assignor.)					
	Tate, S. T., et al. (See Van Houten, J. H., assignor.)					
139, 436	Tatom, I. I., West Point, Ga. Insulator for telegraph-line	May 27, 1873	893	288	3	601
138, 297	Tattershall, J. G., De phi, Ind. Saw-set	Apr. 29, 1873	966	303	3	477
	Taws & Hartman. (See Hartman, J. M., assignor.)					
	Taylor, W., et al. (See Adamson, J. H., assignor.)					
137, 976	Taylor, A., assignor of one-half interest to H. G. Curtis, Newtown, Conn. Dome for stoves	Apr. 15, 1873	631	199	3	433
139, 833	Taylor, A., Brooklyn, N. Y. Letter-box alarm	June 10, 1873	366	114	3	654
141, 674	Taylor, A. E., New Britain, Conn. Bell for sleigh-shafts	Aug. 12, 1873	248	79	4	163
136, 189	Taylor, A. J., Rome, Pa. Revolving rake-shoe	Feb. 25, 1873	746	240	3	223
144, 641	Taylor, B. L., Marlin, Tex. Portable fence	Nov. 18, 1873	413	139	4	534
141, 094	Taylor, C. A., Hartford, Conn. Windmill	July 22, 1873	692	232	4	93
142, 877	Taylor, C. H., New York, N. Y. Nut-lock	Sept. 16, 1873	494	169	4	304
137, 260	Taylor, D. E., Charlton, Mass. Spring-bed	Mar. 25, 1873	827	272	3	340
137, 506	Taylor, E., Memphis, Tenn. Harvester	Apr. 1, 1873	211	64	3	374
143, 792	Taylor, E. T., Philadelphia, Pa. Pantaloon	Oct. 21, 1873	383	127	4	430
	Taylor, F. F. (See Withington & Taylor.)					
142, 962	Taylor, F. F., San Francisco, and G. Withington, Lone City, Cal. Car-coupling	Sept. 16, 1873	568	192	4	311
145, 695	Taylor, G. B., Oakland, Cal. Barrel-tap and faucet	Dec. 16, 1873	591	194	4	657
140, 443	Taylor, G. C., Thibodeaux, La. Apparatus for treating cane-juice	July 1, 1873	83	29	4	15
142, 418	Same. Combined chair and secretary	Sept. 2, 1873	84	28	4	249
137, 261	Taylor, H., Baltimore, Md. Rotary steam-engine	Mar. 25, 1873	828	272	3	341
136, 789	Taylor, J., Lock No. 4, Monongahela River, Pa. Sash for hot-beds, &c	Mar. 11, 1873	392	130	3	286
135, 295	Taylor, J., jr., and J. Prest, Sheffield, England. Bearings for spindles	Jan. 28, 1873	749	241	3	108
145, 254	Taylor, J. C., Roanoke, Ala. Monument	Dec. 2, 1873	193	67	4	600
	Taylor, J. E. (See Thomson & Taylor.) (Design.)					
144, 578	Taylor, J. F., Charleston, S. C. Hydraulic car-brake	Nov. 11, 1873	351	{ 118 119 }	4	518
	Taylor, J. M. (See Humphrey, G. W., assignor.)					
138, 711	Taylor, J. P., Elizabethton, Tenn. Breech-loading fire-arm	May 6, 1873	217	68	3	515
145, 599	Taylor, J. P., Hudson City, N. J. Device for converting motion	Dec. 16, 1873	510	167	4	651
140, 856	Taylor, J. V., La Cygne, Kans. Bed-bottom	July 15, 1873	456	155	4	65
140, 095	Taylor, J. W., Ashland, Va. Barrel-head	June 17, 1873	602	190	3	681

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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141, 402	Taylor, J. W., Ashland, Va. Washing-machine.....	July 29, 1873	1,001	325	4	125
	Taylor, L., Springfield, Vt. Mop-head.....(Extension)...	Feb. 15, 1873			3	127
141, 901	Taylor, M. (See Thorp, T. J., assignor.)					
	Taylor, M., Hartford, Conn. Clamp for thill-couplings.....	Aug. 19, 1873	461	150	4	189
	Taylor, M. S. (See Adamsón, J. H., assignor.)					
143, 646	Taylor, O., Grand Rapids, Wis. Car-coupling.....	Oct. 14, 1873	228	76	4	408
137, 112	Taylor, R., New York, N. Y. Refrigerator.....	Mar. 25, 1873	693	230	3	330
138, 298	Taylor, R. L., Golden Prairie, Iowa. Stretching-tool for wires and ropes.....	Apr. 29, 1873	966	303	3	477
142, 593	Same.....Harrow.....	Sept. 9, 1873	250	82	4	274
136, 281	Taylor, S., Cold Water, Mich. Lifting-jack.....	Feb. 25, 1873	825	266	3	230
140, 096	Taylor, S., Olamón, assignor to self and J. C. Towle, Bangor, Me. Guide for circular saws.....	June 17, 1873	602	190	3	681
139, 342	Taylor, S. J., Rome, N. Y. Washing-machine.....	May 27, 1873	805	257	3	594
	Taylor, S. P. (See Parker, J., assignor.).....(Reissue.)					
138, 957	Taylor, S. T., Baltimore, Md. Feed-water heater for steam-boilers.....	May 13, 1873	437	137	3	544
140, 798	Taylor, T. A., assignor of one-half interest to G. M. Whipple and A. A. Smith, Salem, Mass. Toy money-box.....	July 15, 1873	406	138	4	61
	Taylor, T. B., et al. (See York, J. W., assignor.)					
135, 253	Taylor, W., assignor of one-half interest to W. Maynard, Maynard, Mass. Picker for looms.....	Jan. 28, 1873	716	229	3	105
135, 736	Taylor, W., Mansfield, Mass. Cultivator.....	Feb. 11, 1873	323	103	3	165
144, 163	Taylor, W. B. S., New York, N. Y. Elastic connection for flexible tubing.....	Oct. 28, 1873	721	240	4	467
	Taylor, W. H. (See Stockwell & Taylor.)					
	Same.....(See Towne & Taylor.)					
141, 833	Taylor, W. H., Stamford, Conn. Key-hole guard.....	Aug. 12, 1873	386	126	4	174
141, 834	Same.....Post-office letter-box.....	Aug. 12, 1873	387	126	4	174
141, 835	Taylor, W. H., Baldwinville, N. Y. Harness-pad tree.....	Aug. 12, 1873	388	126	4	174
	Taylor, W. J. (See Walsh & Taylor.)					
145, 461	Taylor, W. J., High Bridge, N. J. Manufacture of iron.....	Dec. 9, 1873	374		4	628
145, 462	Same.....same.....	Dec. 9, 1873	376		4	628
143, 198	Taylor, W. S., Brooklyn, N. Y. Skirt.....	Sept. 23, 1873	762	263	4	337
5, 594	Tayman, B. J., Philadelphia, Pa. Carving-machine.....(Reissue.)	Oct. 7, 1873	149	49	4	392
136, 790	Same.....Machine for trimming soles of boots and shoes.....	Mar. 11, 1873	393	130	3	286
139, 034	Same.....Edge-plane for trimming the soles and welts of boots and shoes.....	May 20, 1873	514	162	3	563
139, 343	Same.....Last and shoe-holder.....	May 27, 1873	806	257	3	594
140, 601	Same.....Machine for trimming and burnishing shoe-soles.....	July 8, 1873	237	80	4	39
139, 344	Teachout, S. T., assignor to self and J. C. Peck, Troy, N. Y. Water-wheel.....	May 27, 1873	807	258	3	594
5, 345	Teal, D. E., New Lisbon, N. Y., assignor to Heywood Brothers & Co. Revolving and tilting chair.....(Reissue.)	Apr. 1, 1873	229	70	3	375
144, 164	Teas, A., Cincinnati, Ohio. Saddle-tree.....	Oct. 28, 1873	721	241	4	467
139, 437	Tebbetts, C. F., and G. Nutting, Fitchburgh, Mass., assignors to Shoe-Machinery Manufacturing Company, Conn. Button-hole cutter.....	May 27, 1873	894	288	3	601
143, 793	Teed, T., Alexandria, Va., assignor of one-half interest to L. H. Chandler and C. P. Culver, Washington, D. C. Endless-chain propeller.....	Oct. 21, 1873	384	127	4	430
138, 543	Teets, S., New York, N. Y. Range for cooking and heating.....	May 6, 1873	66	22	3	503
	Tefft, F. (See Morahan, B., assignor.)					
143, 390	Telling, W. A., and S. Johnson, assignors to Imperial Meter Company, London, England. Gas-meter.....	Sept. 30, 1873	940	318	4	367
	Temple, C. I. (See Birch, W., assignor.)					
136, 679	Temple, D. G., Farmersville, La. Wood fence.....	Mar. 11, 1873	303	100	3	278
22, 901	Temple, J., Dayton, Ohio. Water-wheel.....(Extension)...	Feb. 8, 1873			3	188
135, 948	Temple, J., Middletown, Ohio. Water-wheel.....(Disclaimer filed)...	Feb. 20, 1873			3	189
	Temple, J., Danville, Pa., assignor of one-half interest to R. P. Barbour, Chicago, Ill. Car-coupling.....	Feb. 18, 1873	521	170	3	194
141, 608	Temple, J., assignor by mesne assignment to self and D. J. Rote, Mooresburgh, Pa. Car-brake.....	Aug. 5, 1873	173	55	4	149
142, 059	Temple, J., assignor of one-half interest to D. J. Rote, Mooresburgh, Pa. Car-coupling.....	Aug. 19, 1873	601	198	4	201
136, 881	Templeton, D. D., New York, N. Y. Apparatus for treating linseed-oil.....	Mar. 18, 1873	480	159	3	302
136, 559	Templeton, N. J., Cincinnati, Ohio, assignor to self and H. C. Ezekiel. Machine for sawing staves.....	Mar. 4, 1873	187	60	3	260
142, 963	Tenny, W. P., Boston, Mass. Disinfectant package.....	Sept. 16, 1873	569	192	4	311
137, 333	Terhume, W. S., assignor of one-fourth interest to T. A. Weston, Ridgewood, N. J. Claw-bar.....	Apr. 1, 1873	54	16	3	361
139, 979	Terrel, G. J., North Blanford, Mass. Clothes-washer.....	June 17, 1873	495	157	3	672
	Terry, A. W. (See Wood and W. S., R. Y. H. & A. W. Terry.)					
138, 450	Terry, C., assignor of one-half interest to J. L. Hickok, Saint Louis, Mo. Carpet-stretcher.....	Apr. 29, 1873	1,098	346	3	488
	Terry Clock Company. (See Terry, S. B., assignor.)					
143, 199	Terry, D., Wakeman, Ohio. Holdback for carriages.....	Sept. 23, 1873	763	263	4	337
	Terry, J. (See Cowles, H. D., assignor.)					
	Terry, L. F. (See Smith, J., assignor.)					
139, 438	Terry, N. M., Lyme, Conn. Carriage-curtain fastener.....	May 27, 1873	895	288	3	601
	Terry, R. Y. H. (See Wood and W. S., R. Y. H., & A. W. Terry.)					
	Terry, S. B., Waterbury, Conn. Machine for making paper boxes.....(Extension)...	Sept. 6, 1873			4	240
140, 560	Terry, S. B., assignor to Terry Clock Company, Waterbury, Conn. Detached-lever escapement.....	July 1, 1873	188	63	4	23
	Terry, T. D. (See Janes, Tucker & Terry.)					
142, 964	Terry, T. D., A. Case, and C. Larkin, Knobnoster, Mo. Wheel-plow.....	Sept. 16, 1873	570	193	4	311
	Terry, W. S. (See Wood and W. S., R. Y. H., & A. W. Terry.)					
139, 439	Tesseyman, J., and E. I. Howard, Dayton, Ohio. Valve-gear for direct-acting steam-engines.....	May 27, 1873	896	289	3	601
140, 857	Tester, A., assignor to self and J. Cuninghame, Brooklyn, N. Y. Box-scraper.....	July 15, 1873	457	155	4	65
	Tew, A. F. (See Wright & Tew.)					
139, 211	Thanhauser, S. G., Baltimore, Md. Feather-renovator.....	May 20, 1873	682	214	3	576
135, 385	Tharp, O. P., Cincinnati, Ohio. Rudder for vessels.....	Jan. 28, 1873	832	268	3	114
	Thayer, B. D. (See Remington, Thayer & Manton.)					
	Thayer, H. E. (See Lewis, W. H., assignor.)					
5, 323	Thayer, H. H., Sandwich, Mass., assignor of one-half interest to J. A. Woodbury. Journal-box.....(Reissue.)	Mar. 11, 1873	414	137	3	287
137, 507	Thayer, J., assignor of one-fourth interest to E. S. Smith, Topeka, Kan. Sand-ejector.....	Apr. 1, 1873	212	64	3	374
	Thayer, L. O. (See Duval, J., assignor.)					
138, 299	Thayer, O. S., Attleborough, Mass. Shirt-stud.....	Apr. 29, 1873	967	304	3	477
136, 282	Thayer, W. H., Somerville, assignor to A. J. Tower, Boston, and O. M. Southwick, Somerville, Mass. Bobbin for sewing-machine shuttles.....	Feb. 25, 1873	826	267	3	230
143, 104	Thayer, W. H., Somerville, assignor of one-half interest to A. J. Tower and J. J. Cilley, Boston, Mass. Shuttle for sewing-machine.....	Sept. 23, 1873	690	237	4	331

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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137, 977	Theaker, T. C., New York, N. Y. Railway-car axle.....	Apr. 15, 1873	632	199	3	433
	Theberath, C. M. (See Bauer, J., assignor.)					
	Theberath, J. H. (See Bauer, J., assignor.)					
138, 451	Thede, C., Aledo, Ill. Cultivator.....	Apr. 29, 1873	1,098	347	3	488
136, 680	Themel, H., Esconawba, Mich. Medical compound.....	Mar. 11, 1873	303		3	279
142, 822	Thian, R. P., Georgetown, D. C. Stamp-affixer.....	Sept. 16, 1873	450	152	4	301
145, 696	Thibault, M., Hull, Canada. Machine for cutting nails.....	Dec. 16, 1873	592	194	4	657
	Thiel, J. B. (See Gormann & Thiel.)					
142, 594	Thiele, A., Tickfaw, assignor of one-half interest to L. Schormann, New Orleans, La. Paving-composition.....	Sept. 9, 1873	251		4	274
142, 595	Same..... Composition mastic.....	Sept. 9, 1873	251		4	274
139, 485	Thielemann, J., Newark, N. J. Latch for coach-doors.....	June 3, 1873	39	12	3	612
145, 314	Thielen, N., Sacramento, Cal. Grain and malt cleaner and crusher.....	Dec. 9, 1873	253	84	4	618
136, 190	Thiery, L. C., Newark, N. J. Watch-chain catch.....	Feb. 25, 1873	747	241	3	223
143, 105	Thilmany, W., Cleveland, Ohio. Tanning compound.....	Sept. 23, 1873	692		4	331
141, 020	Thissell, E. A., assignor of one-half interest to J. Churchill, Lowell, Mass. Kettle-lifter.....	July 22, 1873	628	211	4	88
137, 636	Thom, J., Chorley, and J. Stenhouse, London, Great Britain. Recovering fatty and coloring matters from waste wash-liquors.....	Apr. 8, 1873	325		3	395
	Thomas & Robinson. (See Kistler, W. F., assignor.)					
140, 173	Thomas, A. P., and W. J. Evans, Copper Falls Mine, Mich. Rock-drill carriage.....	June 24, 1873	689	216	3	696
5, 563	Thomas, A. W., Philadelphia, Pa. Tournure..... (Reissue.)	Sept. 2, 1873	297	67	4	258
140, 966	Same..... Bustle.....	July 15, 1873	565	189	4	73
144, 165	Thomas, C. A., Bellbuckle, Tenn. Portable fence.....	Oct. 28, 1873	722	241	4	467
141, 186	Thomas, C. H., Williamsburgh, Ohio. Bag-holder.....	July 22, 1873	783	256	4	100
141, 675	Thomas, C. H., Cassville, N. Y. Colter-clasp.....	Aug. 12, 1873	248	79	4	163
139, 486	Thomas, E. H., Louisville, Ky. Hand canceling-stamp.....	June 3, 1873	39	13	3	612
138, 769	Thomas, G. C., Chicago, Ill. Table-leaf support.....	May 13, 1873	280	87	3	530
139, 933	Same..... Shirt.....	June 17, 1873	462	145	3	669
145, 030	Thomas, G. C., Brooklyn, N. Y. Ticket-box for railway-cars.....	Nov. 25, 1873	750	253	4	573
145, 315	Thomas, G. C., Brooklyn, N. Y., assignor to Scovill Manufacturing Company, Waterbury, Conn. Stop-hinge.....	Dec. 9, 1873	254	84	4	618
146, 108	Thomas, G. C., Brooklyn, N. Y. Ticket-box for railway-cars.....	Dec. 30, 1873	987	319	4	712
136, 681	Thomas, H., San Francisco, Cal. Sash-holder.....	Mar. 11, 1873	304	100	3	279
139, 980	Thomas, H., Brooklyn, N. Y. Carving-machine.....	June 17, 1873	496	157	3	672
140, 174	Thomas, J., Hoboken, N. J. Trimming.....	June 24, 1873	690	217	3	696
139, 834	Thomas, J., Middlesborough, England. Metallurgic gas-furnace.....	June 10, 1873	367	114	3	654
140, 741	Same..... Apparatus for ventilating ships and heating steam-boilers.....	July 8, 1873	354	120	4	48
	Thomas, J. H., et al. (See Knight, L., assignor.)					
136, 191	Thomas, J. H., assignor of one-half interest to A. G. Tomay, Baltimore, Md. Insulator for battery-cups.....	Feb. 25, 1873	747	241	3	223
	Thomas, J. J. (See Brown & Thomas.)					
	Thomas, J. N., et al. (See Simpson & Drake, assignors.)					
140, 742	Thomas, J. S., Saint Louis, Mo. Brick-machine.....	July 8, 1873	356	120	4	48
137, 037	Thomas, N., assignor of one-half interest to T. Hull, Chicago, Ill. Valve for air-brake cylinders.....	Mar. 18, 1873	614	203	3	313
138, 594	Thomas, N. G., Ringgold, Tenn. Cistern-strainer.....	May 6, 1873	111	36	3	507
141, 902	Thomas, O. F. Barnes' Corners, assignor to self and A. C. Hughs, Rodman, and A. J. Glasure, Pinkney, N. Y. Pitman.....	Aug. 19, 1873	462	151	4	190
148, 300	Thomas, O. G., Taunton, Mass. Threshold for doors.....	Apr. 29, 1873	967	304	3	477
138, 452	Thomas, R. H., Newport, Ky. Device for adjusting the elevating and depressing screws of rolls.....	Apr. 29, 1873	1,099	347	3	488
	Thomas, Roberts, Stevenson & Co. (See Stevenson, W. S., assignor)..... (Design.)					
138, 712	Thomas, R. P., San Francisco, Cal. Manufacture of soap.....	May 6, 1873	219		3	515
142, 530	Thomas, S., Catasaugua, assignor to J. W. Mickley, Hokendauqua, Pa. Gudgeon or bearing for ore-washers.....	Sept. 2, 1873	187	61	4	257
134, 572	Thomas, S. T., Gilford, N. H. Loom.....	Jan. 7, 1873	66	20, 21	3	12
145, 316	Same..... same.....	Dec. 9, 1873	254	85	4	618
139, 277	Thomas, S. W., North Royalton, Ohio. Insect-destroyer.....	May 27, 1873	758	240	3	590
	Thomas, T. C. (See Barker, C., assignor)..... (Reissue.)					
143, 200	Thomas, W. E., Queenstown, assignor to self and J. T. Lowe, Saint Michael's, Md. Steering-apparatus.....	Sept. 23, 1873	764	264	4	337
140, 444	Thomas, W. J., Frederick City, Md. Wash-boiler.....	July 1, 1873	85	29	4	15
	Thomas, W. L. G. (See Thompson & Beerbrower, assignors.)					
	Thomason, W. J. (See Greer & Thomason.)					
138, 713	Thompson, A., Boston, Mass. Machine for rubbing and rolling seams of boots.....	May 6, 1873	220	69	3	515
	Thompson, A. J. (See Westmoreland, J. M., assignor.)					
141, 522	Thompson, A. S., assignor to self and L. Vasaly, Little Falls, Minn. Paint-brush.....	Aug. 5, 1873	98	30	4	143
143, 311	Same..... Coal-scuttle.....	Sept. 30, 1873	868	297	4	361
	Thompson, A. W. (See Myers, E., assignor.)					
136, 393	Thompson, A. W., New York, N. Y. Construction of ships.....	Mar. 4, 1873	36	13	3	248
136, 560	Thompson, A. W., and J. Pattison, said Pattison assignor to said Thompson, New York, N. Y. Building docks.....	Mar. 4, 1873	187	60	3	260
139, 035	Thompson, C. G., assignor of one-half interest to A. B. Push, Memphis, Tenn. Heating-stove.....	May 20, 1873	515	{ 162 } { 163 }	{ 3 }	563
	Thompson, C. M. (See Huffman, J. D., assignor.)					
6, 968	Thompson, D. K., Clark, Pa. Fly-trap..... (Design.)	Oct. 28, 1873			4	452
135, 864	Thompson, D. O., and B. A. Rice, assignors of one-third interest to J. B. Sweetland, Pontiac, Mich. Nut-lock.....	Feb. 11, 1873	436	142	3	173
143, 202	Thompson, E., and W. H. Greene, assignor of one-third interest to S. Greene, Philadelphia, Pa. Manufacture of sulphuric acid.....	Sept. 23, 1873	765	264	4	337
141, 403	Thompson, F. P., Frederickton, Canada. Nut-lock.....	July 29, 1873	1,001	325	4	125
138, 212	Thompson, G. S., Philadelphia, Pa. Hopper for grinding-mills.....	Apr. 22, 1873	857	271	3	460
	Thompson, H. G. (See Smyth, D. M., assignor.)					
134, 617	Thompson, I. L., Sardis, Ohio. Butt-hinge.....	Jan. 7, 1873	109	36	3	16
	Thompson, J. (See Wright & Thompson.)					
	Thompson, J. A., et al. (See Kugler, O., assignor.)					
140, 967	Thompson, J. A., Readington, N. J. Window-screen.....	July 15, 1873	566	189	4	73
146, 109	Thompson, J. A., Brooklyn, N. Y. Illuminating-apparatus.....	Dec. 30, 1873	988	319	4	712
143, 596	Thompson, J. C., New Haven, Conn. Thrill-coupling.....	Oct. 14, 1873	182	62	4	404
	Thompson, J. E. (See Unglish, J. F., assignor)..... (Reissue.)					
143, 201	Thompson, J. E., Buffalo, N. Y. Seal-lock.....	Sept. 23, 1873	764	264	4	337
145, 600	Thompson, J. G., assignor of one-half interest to F. M. Briggs, Stockton, N. Y. Car-starter.....	Dec. 16, 1873	510	168	4	651
140, 318	Thompson, J. M., San Francisco, Cal. Sectional-cam for ore-stamps.....	June 24, 1873	812	257	3	706

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 255	Thompson, K., and S. D. Beerbrower, assignors of one-fifth interest to W. L. G. Thomas, Oxford, Pa. Construction of railway-cars	Dec. 2, 1873	194	67	4	600
143, 732	Thompson, N. C., San Francisco, Cal. Stirrup	Oct. 14, 1873	313	103	4	414
141, 523	Thompson, N. S., Augusta, Me. Buffing-mandrel	Aug. 5, 1873	98	30	4	143
142, 965	Thompson, P. M., Toronto, Canada. Car-coupling	Sept. 16, 1873	571	193	4	311
137, 637	Thompson, R. A., Beaver Falls, Pa. Molder's draw-spike	Apr. 8, 1873	327	100	3	395
143, 041	Thompson, R. F., Batavia, N. Y. Tire-heater	Sept. 23, 1873	641	220	4	327
138, 056	Thompson, S. A., Manchester, Mich., and C. T. Kendrick, Brooklyn, N. Y. Spring bed-bottom	Apr. 22, 1873	725	229	3	450
138, 824	Thompson, S. R., Portsmouth, N. H. Machine for preparing pottery-stock	May 13, 1873	327	101	3	534
141, 473	Same. Bushing for faucet-holes	Aug. 5, 1873	58	18	4	139
144, 422	Same. Faucet	Nov. 11, 1873	222	74	4	508
	Thompson, T. (See Reed & Thompson.)					
145, 372	Thompson, W., Gardiner, Me. Railway-rail joint	Dec. 9, 1873	298	100	4	622
140, 445	Thompson, W. M., and J. L. Mahurin, Rockfield, Ind. Reciprocating churn	July 1, 1873	85	30	4	15
144, 369	Thoms, J. B., assignor of one-half interest to S. Eccles, jr., Baltimore, Md. Process of extracting sugar from molasses	Nov. 4, 1873	163		4	492
7, 082	Thomson, A. M., and J. E. Taylor, Chicago, Ill. Label (Design)	Dec. 30, 1873			4	698
137, 113	Thomson, G. G., New Haven, Conn. Game-table top	Mar. 25, 1873	694	230	3	331
143, 201	Thomson, J. E., Buffalo, N. Y. Seal-lock (Disclaimer filed)	Nov. 1, 1873			4	585
143, 544	Same. same	Oct. 7, 1873	126	42	4	391
144, 370	Same. Seal-bolt	Nov. 4, 1873	164	55	4	492
	Thomson, J. L. (See Tunnichiff & Thomson.)					
135, 452	Thomson, J. L., Syracuse, N. Y. Straw or mill board	Feb. 4, 1873	56		3	132
138, 714	Thomson, J. M., and J. Cordley, Adrian, Mich. Musical blackboard	May 6, 1873	221	69	3	515
	Thomson, L. B. (See Colby & Thomson.)					
145, 317	Thomson, R., Springfield, Ohio. Refrigerator	Dec. 9, 1873	257	85	4	618
136, 467	Thomson, W. F., Oyster Bay, N. Y. Cooking-vessel	Mar. 4, 1873	99	33	3	253
	Thorn, H., et al. (See Dilworth, J., assignor) (Reissue.)					
137, 736	Thornburg, J. W., assignor of one-half interest to L. H. McGinnis, Woodstock, Va. Fertilizer-spreader	Apr. 8, 1873	418	129	3	402
139, 629	Thorne, W. H., Philadelphia, Pa. Drilling-machine	June 3, 1873	158	53	3	622
142, 966	Thorne, W. H., and I. N. De Haven, Philadelphia, Pa. Drilling-machine	Sept. 16, 1873	572	193	4	311
143, 942	Thornley, J., Charlottesville, Va. Grading-level	Oct. 21, 1873	507	171	4	440
142, 967	Thornton, J., Geneseo, and E. G. Latta, Friendship, N. Y. Bench-iron for harness-makers	Sept. 16, 1873	574	194	4	311
144, 371	Thornton, J., Wellsville, and E. G. Latta, Friendship, N. Y. Hame	Nov. 4, 1873	165	55	4	492
138, 595	Thornton, J. T., Providence, R. I. Shirt button and stud	May 6, 1873	112	37	3	507
5, 687	Thornton, W. M., and T. A. Buckland, Saint Louis, Mo. Spark-arrester for locomotive engines (Reissue)	Dec. 16, 1873	612	200 } 201 }	4	659
138, 958	Thoroughgood, W. M., Salisbury, Md. Device for heading bolts	May 13, 1873	438	137	3	544
5, 418	Thorp, J. H., New York, N. Y. Coal-oil stove (Reissue)	May 20, 1873	701	220	3	578
139, 440	Thorp, J. H., Saint Louis, Mo. Portable burglar-alarm	May 27, 1873	897	289	3	601
140, 743	Thorp, J. H., New York, N. Y. Coal-oil stove	July 8, 1873	357	121	4	49
135, 019	Thorp, T. J., assignor of one-half interest to M. Taylor, Buffalo, N. Y. Blackboard	Jan. 21, 1873	493	158	3	75
	Thorpe, C. N. (See Leeds & Thorpe.)					
142, 749	Thrals, J. L., Warsaw, Ind. Machine for sawing spokes	Sept. 9, 1873	331	128	4	284
141, 964	Thrasher, T. L., Paris, Tex. Plow-coupling	Aug. 19, 1873	510	168	4	193
	Three Rivers Manufacturing Company. (See Caldwell, W. G., assignor.)					
136, 675	Throop, G. E., Syracuse, N. Y. Grain-cleaning machine	Feb. 11, 1873	273	86	3	161
	Throop, J. W. (See Kendrick, H. H., assignor.)					
136, 882	Thurber, A. E., assignor to E. F. Kent and G. Hall, Providence, R. I. Button	Mar. 18, 1873	480	159	3	302
	Thursby, S. I. (See Hope, E. T., assignor) (Reissue.)					
5, 633	Same. (See Schuyler & Thursby.)					
145, 136	Thurston, C. H., Marlborough, N. H. Mode of attaching knobs to screws (Reissue)	Oct. 28, 1873	744	247	4	469
	Thurston, C. H., Marlborough, N. H., assignor to self and J. H. Fowler, Boston, Mass. Machine for making double-pointed screws for knobs	Dec. 2, 1873	93	30, 31	4	593
136, 561	Thurston, E. H., Montreal, Canada, assignor to self and R. Boyd, Marlborough, Mass. Mode of cutting out uppers for shoes	Mar. 4, 1873	188	61, 62	3	260
135, 296	Thurston, J. B., and F. M. West, New York, N. Y. Inkstand	Jan. 28, 1873	749	242		108
140, 744	Tibbets, J. S., Jeffersonville, Ind. Fire-extinguisher	July 8, 1873	358	121	4	49
143, 203	Same. same	Sept. 23, 1873	768	264 } 265 }	4	337
141, 737	Tibbets, L., assignor of one-half interest to J. H. Clarke, Augusta, Me. Coal-sifter	Aug. 12, 1873	297	97	4	167
	Tibbets, R. P., et al. (See Seavey, J. E., assignor.)					
144, 713	Tice, A. W., and N. F. Smalley, Boston, Mass. Measuring-can	Nov. 18, 1873	471	159	4	539
136, 343	Tice, I. P., New York, N. Y. Towing canal-boats	Feb. 25, 1873	878	283	3	234
136, 344	Same. Steam vacuum-pump	Feb. 25, 1873	880	283	3	234
137, 393	Same. Dynamometer-pulley	Apr. 1, 1873	103	33	3	365
143, 794	Same. Automatic fire-extinguisher	Oct. 21, 1873	385	128	4	430
143, 795	Same. Heating-drum	Oct. 21, 1873	385	128	4	430
137, 394	Tice, L. D., New York, N. Y. Exercising-machine	Apr. 1, 1873	104	33	3	365
142, 531	Tichenor, G. K., Wayland, N. Y. Carriage	Sept. 2, 1873	188	61	4	257
	Tiedemann, H. (See McGroder & Tiedemann.)					
143, 106	Tiemann, P. C., New York, N. Y. Preservation of pulp, paste, or slip pigments	Sept. 23, 1873	692		4	331
142, 878	Tierney, J. P., Sacramento, Cal. Miter-box	Sept. 16, 1873	495	169	4	304
	Tiffany & Co. (See Dimes, R., assignor) (Reissue.)					
	Same. (See Moore, E. C., assignor) (Design.)					
	Same. same (Reissue.)					
136, 626	Tiffany, D. B., Xenia, Ohio. Tension-indicator for sewing-machines	Mar. 11, 1873	260	87	3	275
5, 324	Tiffany, J. C., Portsmouth, N. H. Apparatus for the manufacture of illuminating gas (Reissue)	Mar. 11, 1873	414	137	3	288
125, 172	Same. Gasometer or gas-holder	Jan. 21, 1873	615	201	3	85
145, 256	Same. Gas-retort	Dec. 2, 1873	195	67	4	601
145, 257	Tiffany, J. C., Portsmouth, N. H., assignor of one-half interest to C. F. Dodge, New York, N. Y. Method of burning gases in furnaces	Dec. 2, 1873	196	68	4	601
143, 204	Tighe, F., Rockland, Me. Coffin	Sept. 23, 1873	770	265	4	337
141, 738	Tilden, E. B., Prairie City, Iowa. Ice-cream freezer	Aug. 12, 1873	298	98	4	167
138, 715	Tilden, H., Philadelphia, Pa. Gas-machine	May 6, 1873	222	69	3	515
141, 095	Tileston, F. L., San Francisco, Cal. Tuck-marker	July 22, 1873	693	233	4	93
	Tillesen, M. (See Frantze, Tillesen & Gregersen.)					
140, 858	Tilley, J. S., West Troy, N. Y. Adjustable scaffold	July 15, 1873	458	155	4	65
136, 394	Tillinghast, W. F., Burlington, N. J. Frame for making straw envelopes for bottles	Mar. 4, 1873	38	13	3	248
	Tillman, A. (See Croghwell, Tillman & Vanderburg.)					
146, 033	Tillman, S. D., Jersey City, N. J. Plate for tramways	Dec. 30, 1873	917	297	4	706

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137, 737	Tillson, D., Rockland, Me. Steam crane	Apr. 8, 1873	419	129	3	402
136, 283	Tilton, J. C., Pittsburgh, Pa. Wash-boiler	Feb. 25, 1873	826	267	3	230
145, 767	Same. same	Dec. 23, 1873	668	218	4	676
138, 596	Tilton, W. C., Spring Place, Ga., assignor to self and H. Disston & Son, Philadelphia, Pa. Cotton-chopper	May 6, 1873	112	37	3	507
	Timm, C. (See Helm, J., assignor.)					
139, 278	Timberlake, J. B., Salem, Ohio. Pocket car-ventilator and dust-screen	May 27, 1873	759	240	3	590
135, 173	Timby, T. R., Tarrytown, N. Y. Plant-protector	Jan. 21, 1873	617	201	3	85
135, 386	Same. Car-axle lubricator	Jan. 28, 1873	832	268	3	114
136, 284	Same. Spring for vehicles	Feb. 25, 1873	827	267	3	230
136, 791	Same. Car-axles	Mar. 11, 1873	394	130	3	286
145, 258	Same. Railway-tie	Dec. 2, 1873	197	68	4	601
	Timm, C. (See Helm, J., assignor.)					
136, 285	Timm, F., and T. Fantini, Stapleton, N. Y. Cigar-tip cutter	Feb. 25, 1873	827	267	3	230
135, 453	Timpe, G. C., New Orleans, La. Automatic safety-lock for elevators	Feb. 4, 1873	57	18	3	132
135, 454	Same. Elevator	Feb. 4, 1873	58	19	3	132
5, 472	Tingley, C. B. F., Pawtucket, R. I., assignor to W. H. Haskell. Wood-screw machine. (Reissue)	July 1, 1873	200	67	4	24
5, 301	Tinnerholm, C. J., Quincy, Ill., assignor to J. C. White. Manufacture of leather. (Reissue)	Feb. 25, 1873	898		3	235
137, 806	Tippett, R., Harrisburgh, Pa. Man-hole lid for boilers	Apr. 15, 1873	489	153	3	421
142, 968	Tiranoff, J. and N., and A. Kousakoff, St. Petersburg, Russia. Car-wheel	Sept. 16, 1873	574	194	4	311
	Tiranoff, N. (See Tiranoff, J. and N., & Kousakoff)					
139, 630	Tirrell, J. P., Charlestown, Mass. Lamp-post attachment for supporting electrical wires	June 3, 1873	159	53	3	622
5, 382	Tisdale, C. D., Boston, Mass. Changeable-gage car-truck (Reissue)	Apr. 29, 1873	1, 113	352	3	489
139, 279	Same. Railway-switch	May 27, 1873	759	240	3	590
139, 835	Tisdale, C. D., assignor to self and S. Shackell, Boston, Mass. Connecting and disconnecting car bodies and trucks	June 10, 1873	369	114	3	654
135, 297	Tisdale, J., assignor to self and J. Putnam, Norwood, Mass. Clutch-mechanism for treadles for sewing-machines	Jan. 28, 1873	750	242	3	108
143, 543	Tisdale, J., J. Putnam, and H. N. Allen, assignors to J. Tisdale and J. Putnam, Norwood, Mass. Treadle	Oct. 7, 1873	125	42	4	391
136, 627	Tisdale, W. D., assignor to self and C. Babcock, Cortland, N. Y. Car-coupler	Mar. 11, 1873	260	87	3	275
135, 298	Tissot, J., Paris, France. Furnaces for burning coal-dust, small fuel, &c	Jan. 28, 1873	751	242	3	108
136, 792	Tittman, A., Evansville, Ind. Wax-thread sewing-machine	Mar. 11, 1873	395	131	3	286
140, 446	Same. Door-spring	July 1, 1873	86	30	4	15
6, 795	Titus, H. B., Brooklyn, assignor to E. Todd & Co., New York, N. Y. Sign (Design)	Aug. 5, 1873			4	135
140, 319	Tobey, E. H., assignor to self and Saint Louis Railway-Supplies Manufacturing Company, Saint Louis, Mo. Draw-bridge safety switch and signal	June 24, 1873	813	257	3	706
137, 038	Tobey, E. S., Boston, Mass. Fire-proof roof	Mar. 18, 1873	615	203	3	313
138, 716	Tobey, J. F., assignor to self and J. De Este, Medford, Mass. Leg for folding lounges	May 6, 1873	224	70	3	515
139, 745	Tobey, J. T., Haverhill, Mass. Sewing-machine	June 10, 1873	289	90	3	648
145, 697	Tobias, F. H., New York, N. Y. Mechanism for operating screw-propellers	Dec. 16, 1873	594	194	4	658
145, 601	Tobin, J., Newark, N. J. Drop-hammer	Dec. 16, 1873	512	168	4	651
137, 508	Tobin, T. M. and W. F., Middleburgh, Vt. Door-plate and indicator	Apr. 1, 1873	212	64	3	374
	Tobin, W. F. (See Tobin, T. M. and W. F.)					
7, 006	Todd, E., Brooklyn, N. Y. Pencil case (Design)	Dec. 2, 1873			4	585
	Todd, E., & Co. (See Titus, H. B., assignor) (Design)					
145, 463	Todd, G. H., Montgomery, Ala. Horseshoe	Dec. 9, 1873	377	124	4	628
136, 109	Todd, H. B., Plymouth, Conn. Eave-trough hanger	Feb. 18, 1873	661	216	3	205
135, 676	Todd, T. J., Somerville, N. J. Device for straightening railway-rails	Feb. 11, 1873	274	86	3	161
134, 823	Todd, W., Allegheny City, assignor to self and E. A. Kitzmiller, Pittsburgh, Pa. Rubber jam-nut	Jan. 14, 1873	309	98	3	45
135, 387	Todd, W., Portland, Me. Car-coupling	Jan. 28, 1873	833	269	3	114
139, 212	Toler, J., Newark, N. J. Caster	May 20, 1873	683	215	3	576
142, 419	Tolle, M., Saint Louis, Mo. Manufacture of white lead to collect the dust	Sept. 2, 1873	85	28	4	249
143, 943	Tolles, C. F., Nashua, N. H. Fetter for cows' tails	Oct. 21, 1873	508	171	4	440
	Tomay, A. G. (See Thomas, J. H., assignor.)					
5, 409	Tomlinson, J., Onslow, Iowa. Machine for bending tires (Reissue)	May 13, 1873	462	145	3	546
135, 497	Same. Bolt-cutter	Feb. 4, 1873	95	30	3	135
135, 498	Same. Tire-bender	Feb. 4, 1873	95	30	3	135
143, 597	Tommasi, F., Paris, France. Hydrostatic and electric telegraph-cable	Oct. 14, 1873	183	62, 63	4	404
140, 320	Tompkins, C. and I., Troy, N. Y. Machine for napping, brushing, &c., tubular-knitted fabrics	June 24, 1873	814	{ 257 } { 258 }	{ 3 }	706
	Tompkins, H. B., et al. (See Dayton, M. E., assignor.)					
	Tompkins, I. (See Tompkins, C. and I.)					
144, 579	Tompkins, R. C., New York, N. Y. Animal-carass scraping-machine	Nov. 11, 1873	351	119	4	518
	Tompkins, S. E. (See Perrin, C. H., assignor.)					
	Tompkins, S. E., Sing Sing, N. Y., and J. Maclure, Newark, N. J. Harness saddle-tree. (Extension)	Feb. 1, 1873			3	70
5, 495	Tompkins, S. E., Sing Sing, N. Y. Saddle-tree (Reissue)	July 15, 1873	597	201	4	76
140, 968	Same. Harness-saddle	July 15, 1873	566	190	4	73
140, 969	Same. same	July 15, 1873	567	190	4	73
140, 970	Same. same	July 15, 1873	569	191	4	74
144, 486	Toner, J. L., Edinburgh, Ind. Hominy-mill	Nov. 11, 1873	273	92	4	512
139, 213	Tongue, H., Chicago, Ill. Spittoon	May 20, 1873	684	215	3	576
136, 945	Tonner, E. A., Saint Louis, Mo. Lubricating-compound	Mar. 18, 1873	535		3	306
136, 468	Tooth, W. H., Brixton, England. Cartridge made of fusible metals, &c	Mar. 4, 1873	100		3	254
140, 971	Tope, G. M., Leesville, Mo. Corn-harvester	July 15, 1873	570	{ 191 } { 192 }	{ 4 }	74
	Topham, J. P. (See Gilbert & Topham.)					
5, 514	Topham, W. H., Longmeadow, Mass. Spittoon (Reissue)	July 29, 1873	1, 022	331	4	126
	Torley, J. J., et al. (See Kinzer, J., assignor.)					
141, 739	Torrent, J., Muskegon, Mich. Log-turner	Aug. 12, 1873	299	98	4	167
145, 031	Torrent, J., Muskegon, Mich., assignor to Stearns Manufacturing Company, Erie, Pa. Saw-mill dog	Nov. 25, 1873	750	253	4	573
	Torrey, D. (See Murch, I. F., assignor.)					
	Torrey, E. S. (See Fowler, G. B., assignor.)					
	Torrey, J. (See Fowler, G. B., assignor.)					
	Torrey, U. (See Finch, J. M., assignor.)					
135, 865	Torrey, W. A., Mont Clair, N. J. Coating and preserving rope and cordage	Feb. 11, 1873	437		3	173
137, 509	Same. Vulcanized-rubber compound	Apr. 1, 1873	213		3	374
5, 426	Totten, S. E., jr., New York, N. Y., assignor to W. Bloodgood. Sash-holder for carriage-windows (Reissue)	May 27, 1873	907	292	3	602
136, 793	Totten, S. E., jr., New York, N. Y. Sash-holder for carriage-windows	Mar. 11, 1873	396	131	3	286

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141, 474	Touge, R. (See Rushton & Touge.)					
142, 823	Toulmin, M., New Orleans, La., assignor of one-fourth interest to O. F. Cawthorn, Mobile, Ala. Car-starter for street-railways	Aug. 5, 1873	59	18	4	139
142, 969	Toulmin, M., New Orleans, La. Beam-compass	Sept. 16, 1873	451	152	4	301
140, 799	Toussaint, W. W. J., Boston, Mass. Pressure gage and alarm	Sept. 16, 1873	575	194	4	311
134, 824	Toussaint, W. W. J., Boston, Mass. Construction of doors	July 15, 1873	407	138	4	61
138, 301	Tower, A. C., Mendota, Ill. Cultivator	Jan. 14, 1873	309	98, 99	3	45
	Same. Machine for pulverizing soil	Apr. 29, 1873	968	304	3	477
	Tower, A. H. (See Caswell, E., assignor.)					
	Tower, A. J., et al. (See Thayer, W. H., assignor.)					
144, 166	Towers, W. H. (See Kerr, J., assignor.)					
	Towers, W. H., Boston, Mass. Child's carriage	Oct. 28, 1873	723	241	4	467
	Towle, H. E., (See Hollely, J., assignor.)					
	Same. (See Unger & Towle.)					
	Towle, J. C. (See Taylor, S., assignor.)					
138, 959	Towne, G. E., and W. W. Bailey, assignors to Burleigh Rock-Drill Company. Rock-drill carriage	May 13, 1873	439	138	3	544
142, 060	Towne, H. A., Hannibal, Mo. Condenser	Aug. 19, 1873	601	198	4	201
135, 949	Towne, H. R., and W. H. Taylor, said Taylor assignor to said Towne, Stamford, Conn. Ink-pad	Feb. 18, 1873	522	171	3	194
143, 860	Townley, G. J., Parma, Mich. Check-rein	Oct. 21, 1873	444	148	4	434
139, 631	Towns, E., Cisne, Ill. Governor	June 3, 1873	160	53	3	622
144, 423	Townsend, C. H., T. E. Hughes, and A. A. Keith, Minneapolis, Minn. Postal-card case	Nov. 11, 1873	223	74	4	508
136, 192	Townsend, D. A., Unionville, S. C. Automatic manger	Feb. 25, 1873	748	241	3	223
	Townsend, F. (See Blessing, J. H., assignor.)					
	Same. (Reissue.)					
134, 711	Townsend, G. W., assignor to self, O. C. Townsend, and H. W. Hitchcock, Hubbardston, Mich. Extension-table slide	Jan. 7, 1873	198	64	3	22
	Townsend, H. E. (See Dawes, A., assignor.)					
	Same. (See Ferren, M. J., assignor.)					
	Townsend, H. E., et al. (See Howard & Jackson, assignors) (Reissue.)					
137, 638	Townsend, H. H., Milton Mills, N. H. Press for printing fabrics	Apr. 8, 1873	328	101	3	395
	Townsend, O. C., et al. (See Townsend, G. W., assignor.)					
141, 187	Townsend, W., assignor of one-half interest to J. W. Pierce, Auburn, N. Y. Picking-mechanism for looms	July 22, 1873	783	256	4	100
	Townsend, W. H. (See Rommel, C., assignor.)					
136, 562	Towsley, C. A., Battle Creek, Mich. Invalid bed-bottom	Mar. 4, 1873	189	62	3	260
	Towson, S. T. (See McDonald, E. H., assignor.)					
	Tracy, C. C., et al. (See Hook, A. H., assignor.)					
	Tracy, C. C. (See Shaw & Tracy.)					
	Tracy, G. S. (See Galt & Tracy.)					
	Same. (Reissue.)					
143, 429	Tracy, J. B., Lincoln, Del. Car-coupling	Oct. 7, 1873	30	11	4	383
145, 698	Tracy, J. D., and J. F. Platt, Sterling, Ill. Hand corn-planter	Dec. 16, 1873	595	195	4	658
143, 476	Tracy, W. C., Brooklyn, N. Y. Artificial teeth	Oct. 7, 1873	65	23	4	386
139, 487	Trafton, A. C., Worcester, Mass. Drill-gage	June 3, 1873	41	13	3	612
	Trafton, J. W. (See Hyde, A., assignor.)					
143, 042	Trafton, J. W., Chicopee Falls, Mass. Self-closing faucet	Sept. 23, 1873	642	220	4	327
135, 950	Traphagen, H. L., assignor to self and R. N. Pratt, New York, N. Y. Curtain-fixture	Feb. 18, 1873	523	171	3	194
139, 632	Trapp, T. J., Williamsport, Pa. Hose-coupling	June 3, 1873	160	54	3	622
	Trask, C. H., et al. (See Fischer, W. E., assignor.) (Reissue.)					
142, 657	Trask, C. H., Lynn, and H. F. Wheeler, Boston, Mass. Machinery for lasting boots and shoes	Sept. 9, 1873	301	{ 99 } { 100 }	{ 4 }	278
143, 205	Trask, W. R., assignor of one-third interest to T. H. Dinsmore, Skowhegan, Me. Combined shirt-bosom and lung-protector	Sept. 23, 1873	771	265	4	337
136, 469	Traut, J. A., New Britain, Conn. Carpenter's plane	Mar. 4, 1873	101	34	3	254
141, 475	Traut, J. A., assignor to The Stanley Rule and Level Company. New Britain, Conn. Carpenter's gage	Aug. 5, 1873	60	18	4	140
142, 420	Travers, J., Roslyn, N. Y. Machine for making window-sashes	Sept. 2, 1873	86	28	4	249
141, 188	Travis, C. L., Minneapolis, Minn. Machine for perforating drive-well points	July 22, 1873	784	{ 256 } { 257 }	{ 4 }	100
6, 808	Travis, J. F., New York, N. Y. Gasalier (Case A. Design)	Aug. 19, 1873			4	185
6, 809	Same. Gas-bracket (Case B. Design)	Aug. 19, 1873			4	185
5, 690	Travis, J. H., Charlestown, Mass. Extension foot-rest for chairs (Reissue)	Dec. 16, 1873	615	201	4	660
6, 834	Travis, J. H., Charlestown, Mass. Chair-frame (Design)	Sept. 2, 1873			4	241
140, 097	Same. Caster-attachment for furniture	June 17, 1873	603	190	3	681
142, 532	Travis, R., assignor of one-half interest to J. Russell, Elkton, Ky. Hair-wash	Sept. 2, 1873	189		4	257
137, 978	Travis, W. E., Ypsilanti, Mich. Crosscut-saw handle	Apr. 15, 1873	634	199	3	433
143, 647	Trayser, F. L., Maysville, Ky. Piano-action	Oct. 14, 1873	228	77	4	408
	Treadwell, N. P. (See Hopkins, E. R., assignor.)					
134, 573	Treadwell, W. B., Albany, N. Y. Heating-stove	Jan. 7, 1873	68	21	3	12
145, 074	Treat, J. E., Boston, Mass. Clasp for supporting stockings, &c	Dec. 2, 1873	30	10	4	588
	Tremlett, J. (See Harris, D., assignor.)					
137, 738	Trevitt, C. S., Washington, D. C. Cabinet chair and secretary combined	Apr. 8, 1873	422	130	3	403
	Triboulet, L. (See Dallemagne & Triboulet.)					
144, 805	Trickett, J., Quincy, Ill. Washing-machine	Nov. 18, 1873	549	186	4	546
	Trimble, J. L. (See Borden & Trimble.)					
5, 254	Trinder, W., Philadelphia, Pa. Medical compound for lung and other diseases. (Reissue)	Jan. 21, 1873	651		3	87
140, 321	Tripler, J. L., Merchantville, N. J. Refrigerating-apparatus	June 24, 1873	816	{ 258 } { 259 }	{ 3 }	707
142, 300	Tripp, H. B., Boston, Mass. Bolt-work for safe-doors	Aug. 26, 1873	818	{ 270 } { 271 }	{ 4 }	228
145, 032	Same. Device for operating safe-doors	Nov. 25, 1873	751	254	4	573
5, 439	Tripp, L. A., deceased, assignor by mense assignment to The Salem Shade-Roller Manufacturing Company, Salem, Mass. Curtain-fixture (Reissue)	June 3, 1873	188	61	3	624
140, 800	Tripp, O. F., Battle Creek, Mich. Knitting-machine	July 15, 1873	408	139	4	61
142, 301	Same. Knit mitten	Aug. 26, 1873	819	271	4	228
	Trippe, S. G. (See Stowe, S. F., assignor.)					
135, 737	Trissler, W. D., Dunkirk, N. Y. Fruit-basket	Feb. 11, 1873	324	104	3	165
142, 533	Troll, F. N., Baltimore, Md. Corpse-cooler	Sept. 2, 1873	189	61	4	257
	Tronchon, A. P. (See Guebhard & Tronchon.)					
	Troop, J. (See Middleton, S., assignor.)					
141, 189	Trossin, O., Berlin, Germany. Air and gas engine	July 22, 1873	785	257	4	100
	Trotter, C. W., administrator. (See Trotter, J. G.)					

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145, 976	Trotter, J. G., deceased, by C. W. Trotter, administrator, Brooklyn, N. Y. Apparatus for condensing and collecting white zinc	Dec. 30, 1873	871	282	4	702
135, 174	Trouard, A., New Orleans, La. Sugar-cane cultivator	Jan. 21, 1873	618	201	3	85
143, 545	Trowbridge, J. H., New Haven, Conn. Machine for packing, wrapping, and labeling tobacco	Oct. 7, 1873	127	43, 44	4	391
144, 167	Trowbridge, W. O., Newton, assignor to Mason and Hamlin Organ Company, Boston, Mass. Fall for parlor-organs	Oct. 28, 1873	724	242	4	467
142, 534	Trowbridge, W. P., New Haven, Conn. Steam-generator	Sept. 2, 1873	190	62	4	257
137, 578	Troxel, J., Nankin, Ohio. Universal joint	Apr. 8, 1873	280	86	3	391
137, 157	Truax, J. K., Pittsburgh, Pa. Oils for lubricating from petroleum	Mar. 25, 1873	730	.....	3	333
143, 598	True, M. E., Oakfield, N. Y. Saw-set	Oct. 14, 1873	185	63	4	404
138, 960	Truesdale, C., Cincinnati, Ohio. Molders' flask	May 13, 1873	440	138	3	544
136, 286	Truesdell, L. E., Warren, Mass. Motor	Feb. 25, 1873	828	268	3	230
136, 287	Same. Wagon for hauling stone or heavy bodies	Feb. 25, 1873	830	268	3	230
143, 796	Truesdell, L. W., and F. Curtis, Owego, N. Y. Wash-boiler	Oct. 21, 1873	386	128	4	430
	Truesdell, W. (See McConnell, Truesdell & Mertsheimer.)					
137, 979	Trump, F., Springfield, Ohio. Stock for millstone-picks	Apr. 15, 1873	634	200	3	433
145, 033	Trussell, J. W., assignor to W. P. Kellogg & Co., Troy, N. Y. Curry-comb	Nov. 25, 1873	753	254	4	574
135, 866	Truxell, A., and F. J. Williams, Toledo, Ohio. Car-coupling	Feb. 11, 1873	437	{ 142 143 }	{ 3 3 }	{ 173 173 }
136, 628	Truxell, J. S., Greensburgh, Pa. Harvester	Mar. 11, 1873	261	88	3	275
137, 510	Same. Harvester-rake	Apr. 1, 1873	213	65	3	374
143, 391	Same. Harvester-dropper	Sept. 30, 1873	941	318	4	367
	Tryon, S., et al. (See Pease, J., assignor.)					
	Tubbs, T. J. (See Blom, C., jr., assignor.)					
144, 642	Tuck, J. P., Houlton, Me. Combined door-securer and key-ring	Nov. 18, 1873	414	139	4	535
5, 566	Tucker, C. (See Collyer, C. W., assignor.)					
	Tucker, C. and W. H., Indianapolis, Ind., assignors by mesne assignment to N. Tucker and R. S. Dorsey. Till-alarm	Sept. 9, 1873	391	130	4	285
	Tucker, H. (See Janes, Tucker & Terry.)					
134, 947	Tucker, H., Newton, Mass. Can for packing and transporting paint, &c.	Jan. 14, 1873	414	132	3	53
139, 214	Same. Box or can for paints, &c.	May 20, 1873	684	215	3	576
	Tucker, H. A. (See Jameson, J., assignor.)					
	Tucker, J. A. (See Hammond & Tucker.)					
	Tucker Manufacturing Company. (See Hull, L., assignor.)					
	Tucker, N., et al. (See Tucker, C. and W. H., assignors)..... (Reissue.)					
135, 175	Tucker, S., Wabash, Ind. Sheep-holder	Jan. 21, 1873	618	201	3	85
135, 388	Tucker, T. M., Newark, N. J. Casting centers on cast-iron screws	Jan. 28, 1873	834	269	3	114
136, 110	Tucker, W., Fiskedale, Mass. Saw-gummer	Feb. 18, 1873	662	216	3	205
140, 098	Tucker, W., assignor to self and C. F. Grosvenor, Fiskedale, Mass. Loom-shuttle	June 17, 1873	604	190	3	681
135, 607	Tucker, W. B., assignor to J. G. McCulloch, Baltimore, Md. Fire-kindling	Feb. 4, 1873	204	.....	3	143
138, 770	Tucker, W. B., assignor to F. Lloyd, Baltimore, Md. Manufacture of artificial hydraulic cement	May 13, 1873	281	.....	3	530
	Tucker, W. H. (See Tucker, C. and W. H.)..... (Reissue.)					
	Tucker, W. R., executor. (See Fritz, G.)					
	Tufts, J. W. (See Andrews, M. S., assignor.)					
	Same. (See Cady, W. R., assignor.)					
	Same. (See Kennedy, J. C., assignor.)					
	Same. (See Meacham, G. F., assignor)..... (Design.)					
	Same. (See Wilder, E. F., assignor.)					
136, 345	Tufts, J. W., Medford, Mass. Soda-water apparatus	Feb. 25, 1873	881	283	3	234
	Tufts, O., deceased, by L. A. Bigelow and J. A. Brodhead, administrators, Boston, Mass. Elevator or hoisting-apparatus for hotels, &c. (Extension)..... (Disclaimer filed).....	Aug. 9, 1873	.....	.....	4	108
25, 061	Same. Passenger-elevator	Aug. 7, 1873	.....	.....	4	108
143, 392	Tufts, O., Boston, Mass. Device for suspending hammocks	Sept. 30, 1873	942	319	4	367
143, 944	Same. Elevator	Oct. 21, 1873	509	172	4	440
144, 168	Same. Hammock-support	Oct. 28, 1873	725	242	4	467
144, 424	Tufts, W. H., Lynn, Mass. Buffet-table	Nov. 11, 1873	294	74, 75	4	508
141, 404	Tugby, H., Woodville, England. Brick-kiln	July 29, 1873	1,002	325	4	125
145, 602	Tull, J. W., and J. W. Weston, Windsor, Ill. Washing-machine	Dec. 16, 1873	512	168	4	651
144, 714	Tullock, J., Jamestown, Cal. Ore-stamp feeder	Nov. 18, 1873	472	160	4	539
5, 467	Tully, A. R., Harlem, N. Y. Wagon-top	June 24, 1873	842	267	3	709
134, 712	Tully, F., assignor to self and C. H. Banes, Philadelphia, Pa. Restoring ring-traveler spinning-rings	Jan. 7, 1873	199	64	3	22
145, 603	Tunbridge, J., Newark, N. J. Process of amalgamating gold and silver	Dec. 16, 1873	513	168	4	651
134, 825	Tunis, W. W., Easton, Md. Friction driving-gear	Jan. 14, 1873	311	99	3	45
142, 596	Tunison, I. C., Roodhouse, and A. Reeve, Pike County, Ill. Railway cattle-guard	Sept. 9, 1873	252	82	4	274
145, 699	Tunnickliff, J. R., Van Hornesville, and J. L. Thomson, Syracuse, N. Y. Tobacco-stripping machine	Dec. 16, 1873	596	195	4	658
	Tunstill, W. (See Dixon & Tunstill.)					
135, 867	Tunstill, W., Brooklyn, N. Y. Saw-set	Feb. 11, 1873	439	143	3	173
140, 659	Same. Clothes-clamp	July 8, 1873	284	96	4	43
142, 597	Turbayne, D., assignor to Globe Nail Company, Boston, Mass. Manufacture of horse-shoe-nails	Sept. 9, 1873	253	83	4	274
134, 948	Turbayne, D., and G. M. Wyman, assignors to Globe Nail Company, Boston, Mass. Manufacture of horseshoe-nails	Jan. 14, 1873	415	133	3	53
135, 299	Turley, J., Mitchell, Ind. Tug-fastening	Jan. 28, 1873	752	242	3	108
	Turnbull, A., New Britain, Conn. Scales..... (Extension)..... (Reissue).....	Sept. 13, 1873	.....	.....	4	270
5, 591	Same. Bed-bottom	Oct. 7, 1873	146	48	4	392
137, 511	Turnbull, A., assignor to The National Wire-Mattress Company, New Britain, Conn. Bed-bottom	Apr. 1, 1873	214	65	3	374
5, 312	Turnbull, A., and R. L. Webb, assignors to The National Wire-Mattress Company, New Britain, Conn. Bed-bottom..... (Reissue).....	Mar. 4, 1873	213	70, 71	3	262
139, 837	Turnbull, A., and R. L. Webb, assignors to Landers, Frary & Clark, New Britain, Conn. Fruit-parer	June 10, 1873	370	115	3	654
140, 972	Turnbull, C. B., Washington, D. C. Street-car awning	July 15, 1873	572	192	4	74
145, 259	Turneaure, R., assignor to self and B. Williams, Rockford, Ill. Machine for heading hair	Dec. 2, 1873	198	68	4	601
141, 965	Turner, B. G., Fremont, Nebr. Wheel and axle for harvesters	Aug. 19, 1873	510	168	4	194
143, 733	Turner, C., Lenton, England. Machinery for removing dirt from skins	Oct. 14, 1873	313	104	4	414
137, 512	Turner, D. C., Clifton, W. Va. Apparatus for the manufacture of bromine	Apr. 1, 1873	215	65	3	374
137, 513	Turner, E., Greensburgh, Pa. Nut-lock	Apr. 1, 1873	216	66	3	374
137, 579	Turner, E. M., Fort Worth, Tex. Tent	Apr. 8, 1873	280	86	3	391
146, 110	Turner, E. M., Allegheny City, Pa. Frame for holding work on sewing-machines	Dec. 30, 1873	989	319	4	712
139, 215	Turner, E. S., Palmyra, Mo. Hedge-hook	May 20, 1873	685	215	3	576
141, 524	Turner, G. B., Cuyahoga Falls, Ohio. Separators for cleaning grain	Aug. 5, 1873	99	31	4	143

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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140, 391	Turner, J., Chicago, Ill. Treating offal and manufacturing gas.	July 1, 1873	47	16	4	12
137, 114	Turner, J. & S., Toronto, Canada. Machines for cutting biscuit.	Mar. 25, 1873	694	231	3	331
144, 487	Turner, J. R., and J. Jacobs, Fredericktown, Mo. Subsoil-plow.	Nov. 11, 1873	274	92	4	512
	Turner, L., et al. (See Eames, J. N., assignor.)					
	Turner, Parks & Co. (See Vaughn, Camp & Merrill, assignors.)					
136, 470	Turner, R. D., New York, N. Y. Apparatus for treating alcoholic liquids in spray with ozone, for ageing and the production of vinegar.	Mar. 4, 1873	102	34	3	254
	Turner, S. (See Turner, J. & S.)					
138, 106	Turner, S. B., Adams County, Ill. Hedge-trimmer.	Apr. 22, 1873	764	243	3	353
	Turner, Seymour & Judds. (See Seymour, F. J., assignor.)					
134, 713	Turner, W. E., Neosho Falls, Kans. Compound for use in tobacco-pipes.	Jan. 7, 1873	199	65	3	22
139, 633	Turner, W. E., Fort Snelling, Minn. Instruments for cleaning gun-barrels.	June 3, 1873	161	54	3	622
141, 676	Turner, W. E., Neosho Falls, Kans. Grain-separator.	Aug. 12, 1873	249	79	4	163
139, 981	Turner, J., assignor to E. H. Faulkner, New York, N. Y. Loom for weaving hair-cloth.	June 17, 1873	497	157	3	672
145, 318	Turtlot, W. W., Rome, N. Y. Wash-boiler.	Dec. 9, 1873	258	86	4	618
5, 354	Tustin, W. I., San Francisco, Cal. Windmill.	Apr. 15, 1873	654	205	3	435
135, 300	Tuthill, D. S., Newburgh, N. Y. Railway-track.	Jan. 28, 1873	752	243	3	108
6, 620	Tuttle, E. A., Morristown, N. J. Hot-air register.	Apr. 29, 1873			3	471
6, 621	Same. same.	Apr. 29, 1873			3	471
6, 622	Same. same.	Apr. 29, 1873			3	471
6, 645	Same. same.	May 6, 1873			3	497
6, 646	Same. same.	May 6, 1873			3	497
135, 738	Tuttle, E. A., Williamsburgh, N. Y. Swing.	Feb. 11, 1873	324	104	3	165
136, 682	Tuttle, E. A., Brooklyn, N. Y. Hot-air register.	Mar. 11, 1873	304	101	3	279
141, 677	Same. Nursery-gate.	Aug. 12, 1873	250	79	4	163
138, 544	Tuttle, E. N., Fitchburgh, Mass. Tilting chair.	May 6, 1873	67	23	3	503
	Tuttle, G. W., et al. (See Utley, R. G., assignor.)					
	Tuttle, H. B. (See Chickering & Tuttle.)					
	Tuttle, J. W. (See McGee, B. J., assignor.)					
145, 977	Tuttle, J. W., Watertown, Mass. Combined nubia and veil.	Dec. 30, 1873	872	283	4	702
138, 057	Tuttle, L. A., Berea, Ohio. Sash-holder.	Apr. 22, 1873	726	230	3	450
143, 599	Twamly, J., assignor of two-thirds interest to P. J. Strain, Troy, N. Y. Dice-box.	Oct. 14, 1873	185	63	4	404
135, 301	Twedy, J., Vernon, Ind. Corn-corer.	Jan. 28, 1873	753	243	3	108
	Twiddy, W. (See Crandall & Twiddy.)					
141, 836	Twombly, O., Ashland, N. H. Knitting-machine.	Aug. 12, 1873	388	127	4	174
139, 280	Tylander, H. E., Keokuk, Iowa. Cigar-machine.	May 27, 1873	760	241	3	590
139, 634	Tyler, C. N., Buffalo, N. Y. Steam-condensing and water-heating tank.	June 3, 1873	162	54	3	622
140, 322	Tyler, E. H., Rockville, Mass. Flier for covering bonnet-wires.	June 24, 1873	817	259	3	707
140, 745	Tyler, H. B., assignor to Bradley & Hubbard, West Meriden, Conn. Tape-measure.	July 8, 1873	359	121	4	49
139, 836	Tyler, N. B., Warren, Ohio. Pigeon-trap.	June 10, 1873	370	115	3	654
136, 471	Tyler, R. A., Haverhill, Mass. Ironing-apparatus.	Mar. 4, 1873	103	34	3	254
141, 903	Tyler, S. W., Troy, N. Y. Potato-digger.	Aug. 19, 1873	462	151	4	190
	Tyler, W. W. (See Risdon & Tyler.)					
142, 359	Tyng, L. B., Lowell, Mass. Railway-rail chair.	Sept. 2, 1873	34	12	4	245
	Tyrrell, A. R. (See Filkins, R. A., assignor.)					
140, 323	Tyrrell, W. H., Philadelphia, Pa. Spittoon.	June 24, 1873	818	259	3	707
	Uda, M., et al. (See Porta, P., assignor.)					
90, 973	Udell, C. C., Chicago, Ill. Step-ladder.	June 9, 1873			3	608
138, 961	Uebel, F., Cedar Rapids, Iowa. Game-table.	May 13, 1873	442	138	3	544
	Uhl, C. F., et al. (See Shawk, G. W., assignor.)					
138, 717	Uhl, J. E., Renovo, Pa. Car-axle box.	May 6, 1873	224	70	3	515
	Ulery, W. G. (See Nesbitt, J., assignor.)					
138, 453	Ulmer, C. J., East Cambridge, Mass. Gage for circular saws.	Apr. 29, 1873	1,100	347	3	488
145, 319	Ultsch, J. B., Cambridge, Mass. Soap-cutting machine.	Dec. 9, 1873	259	86	4	618
	Umholtz, A. (See Umholtz, P., assignor.)					
144, 372	Umholtz, P., assignor of one-half interest to A. Umholtz, Tremont, Pa. Grate-bar.	Nov. 4, 1873	165	55	4	492
140, 746	Underwood, J. B., assignor to E. L. Pemberton, J. W. Hinsdale, and S. C. Underwood, Fayetteville, N. C. Combined cotton chopper and cultivator.	July 8, 1873	360	122	4	49
144, 580	Underwood, O., Milford, Mass. Heel for boots and shoes.	Nov. 11, 1873	352	119	4	518
	Underwood, S. C., et al. (See Underwood, J. B., assignor.)					
143, 477	Unger, D. H., Philadelphia, Pa. Machine for waving or embossing leather straps.	Oct. 7, 1873	66	23	4	386
144, 643	Unger, W., Newark, N. J., and H. E. Towle, New York, N. Y. Telegraphic apparatus for automatic signaling.	Nov. 18, 1873	414	139 140	4	535
143, 546	Ungerer, A., Pfrozheim, Germany. Process of treating fibrous substances for paper-pulp.	Oct. 7, 1873	132	44	4	391
5, 675	Unglish, J. F., assignor of one-half interest to J. E. Thompson, Webster, N. Y. Vegetable-scoop.	Dec. 2, 1873	210	72	4	602
	Union Manufacturing Company. (See Bradley, M., assignor.)					
	Union Paper-Bag Company. (See Benner, L. D., assignor.)					
	Union Stone Company. (See Elliott, J. S., assignor.)					
	Same. same.					
	Union Stove Works. (See Finch, R. R., assignor.)					
	Union Water-Meter Company. (See Ballard, A. J., assignor.)					
	Same. (See Fitts, B., assignor.)					
	United Power-Press Company. (See Esmond, R., assignor.)					
	Same. same.					
	United States Chemical Compound Company. (See Lavo, J. J., assignor.)					
	Updegraf, M. E. (See Cooper, A., assignor.)					
141, 405	Upton, G. W. D., Springfield, Mass. Paper-folding machine.	July 29, 1873	1,004	326	4	125
141, 837	Urban, H., Cincinnati, Ohio. Apparatus for tempering steel plates and similar articles.	Aug. 12, 1873	389	127	4	174
144, 715	Urdahl, T., Cross Plains, assignor to S. Mills, Madison, Wis. Binder's attachment for harvesters.	Nov. 18, 1873	472	160	4	539
143, 797	Ure, J., Saginaw, Mich. Corn-husker.	Oct. 21, 1873	386	128	4	430
139, 092	Urie, T., Corning, Iowa. Shaft-coupling for earth-augers.	May 20, 1873	571	179	3	567
139, 281	Urie, T. S., Hubbardston, Mich. Sash and door clamp.	May 27, 1873	762	241	3	590
141, 740	Urso, V. D., and B. Charles, Evansville, Ind. Clothes-pin.	Aug. 12, 1873	300	98	4	167
135, 176	Usher, J., West Albany, N. Y. Dish-washing machine.	Jan. 21, 1873	619	202	3	85
136, 472	Ustick, S., Philadelphia, Pa. Car-axle box.	Mar. 4, 1873	104	35	3	254
142, 302	Same. same.	Aug. 26, 1873	819	271	4	228
142, 303	Same. same.	Aug. 26, 1873	820	272	4	228
136, 193	Utley, R. G., Boston, Mass., assignor to C. H. Pierce, C. H. Gilman, and G. W. Tuttle. Machine for making extension-table tops.	Feb. 25, 1873	749	241	3	224
143, 734	Utter, J., Central Falls, R. I. Planing-machine.	Oct. 14, 1873	315	105	4	414
6, 745	Utter, S. S., Brooklyn, N. Y. Cooking-range.	July 1, 1873			4	8
145, 700	Vacher, E., New York, N. Y. Fire-proof building.	Dec. 16, 1873	597	195	4	658

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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145, 260	Vaders, H. T., Lansdale, Pa. Machine for severing tin cans	Dec. 2, 1873	199	69	4	601
141, 609	Vail, W. A., Clinton, Conn. Life-boat	Aug. 5, 1873	174	55, 56	4	149
	Vaill, E. W. (See Boyd, A. C., assignor.)					
140, 660	Vairin, A. L. P., Ripley, Miss. Subsoil-plow	July 8, 1873	285	96	4	43
134, 618	Valade, E., Memphis, Tenn. Mode of utilizing the currents of rivers	Jan. 7, 1873	109	36	3	16
140, 392	Valentin, W., New York, N. Y. Extension-table	July 1, 1873	48	16	4	12
136, 946	Valentine, O. J., Newark, N. J. Box-slide for ornamental chains	Mar. 18, 1873	536	177	3	306
142, 598	Valk, L. B., Brooklyn, N. Y. Ventilating buildings	Sept. 9, 1873	254	83	4	274
137, 639	Vallee, F., Philadelphia, Pa. Compositor's stand	Apr. 8, 1873	329	101	3	395
146, 034	Valley, J., Canton, Ohio. Bridge	Dec. 30, 1873	918	297	1	706
141, 838	Van, J., Cincinnati, Ohio. Top-plate for cooking-stoves	Aug. 12, 1873	391	127	4	174
142, 360	Same. Gas-burner for heating	Sept. 2, 1873	35	12	4	245
138, 597	Van Allen, A., Freeport, Ill. Washing-machine	May 6, 1873	113	37	3	507
	Van Allen, G. W., et al. (See Bingham, S. H., assignor.)					
141, 096	Van Alstine, A. C., New York, N. Y. Dovetail-machine	July 22, 1873	694	233	4	93
137, 395	Van Anden, W., Poughkeepsie, N. Y. Nut	Apr. 1, 1873	104	34	3	365
139, 934	Van Buren, J. S., Troy, N. Y. Stove-grate	June 17, 1873	463	145	3	669
135, 177	Vaneleave, T. Y., Cornersville, Tenn. Apparatus for detaching horses from vehicles	Jan. 21, 1873	620	202	3	85
134, 619	Vandegrift, A. J., Covington, Ky. Metallic fabric for scouring and percolating purposes	Jan. 7, 1873	110	36	3	16
135, 608	Same. Metallic fabric for scouring grain and percolating purposes	Feb. 4, 1873	205	63	3	143
136, 563	Vandenburg, O., New York, N. Y. Ventilating underground and sub-surface railways	Mar. 4, 1873	190	62, 63	3	260
140, 973	Vanderbilt, W. W., New York, N. Y. Piston-rod packing	July 15, 1873	572	192	4	74
	Vanderburg, E. L. (See Croughwell, Tillman & Vanderburg.)					
	Vanderburg, Wells & Co. (See Blackman, J. F., assignor.)					
	Vanderhoof, O. G. (See Andrews & Godfrey, assignors.)					
146, 111	Vanderpool, F., assignor to self and J. E. Wood, Mayfield, N. Y. Glove-turning machine	Dec. 30, 1873	990	319	4	712
139, 838	Van Dervort, W. V., and R. B. Walker, New Antioch, Ohio. Automatic cradle	June 10, 1873	372	115	3	654
141, 741	Van Derzee, C., assignor of two-thirds interest to D. Doremus and D. H. Mathias, Albany, N. Y. Mechanical power	Aug. 12, 1873	300	98	4	167
140, 602	Van De Water, H., Rochester, N. Y. Turbine water-wheel	July 8, 1873	239	81	4	39
	Van Dorn, T. D. (See Mooney, Van Dorn & Winterberg.)					
137, 039	Vanduzen, B. C., Cincinnati, Ohio. Bed-bottom	Mar. 18, 1873	616	204	3	313
138, 454	Van Eps, H. R., Peoria, Ill. Card-rack	Apr. 29, 1873	1,100	347	3	488
135, 389	Van Est, P. W., Rochester, N. Y. Frame for pillow-spreads	Jan. 28, 1873	834	269	3	115
	Van Fleet, J., et al. (See Kugler, O., assignor.)					
140, 974	Vanfossen, G., Bethesda, Ohio. Pruning-shears	July 15, 1873	573	193	4	74
146, 035	Van Gaasbeek, W., Hudson, N. Y. Lid-lifter	Dec. 30, 1873	918	297	4	706
136, 346	Van Gieson, W. H., Whitewater, Wis. Railway snow-plow	Feb. 25, 1873	882	294	3	234
139, 635	Same. Railway-switch	June 3, 1873	164	55	3	622
139, 982	Van Gilder, S., Knoxville, Tenn. Butt-hinge	June 17, 1873	499	158	3	672
140, 447	Same. Boot-blackening kit	July 1, 1873	86	30	4	15
136, 564	Van Gorder, G. W., Warren, Ohio. Sulky-harrow	Mar. 4, 1873	192	63	3	260
	Van Haagen, A. (See Van Haagen, C., assignor.)					
136, 794	Van Haagen, C., assignor to self and A. Van Haagen, Philadelphia, Pa. Slide-rest for lathes	Mar. 11, 1873	397	131	3	286
141, 525	Van Herwerden, C., assignor to self and C. Jansen, Williamsburgh, N. Y. Composition for water-proofing wall-paper	Aug. 5, 1873	100		4	143
141, 966	Van Hoevenbergh, H., Brooklyn, N. Y. Telegraph sounder	Aug. 19, 1873	511	168	4	194
139, 983	Van Hoosen, C., New York, N. Y. Button-hole cutter	June 17, 1873	499	158	3	672
138, 545	Van Horn, E. D., and C. N. Farr, Philadelphia, Pa. Brush-machine	May 6, 1873	68	23	3	503
	Van Houten, E. F., et al. (See Van Houten, J. H., assignor.)					
141, 967	Van Houten, E. F., Newark, N. J., assignor of one-half interest to S. T. Tate, Brooklyn, N. Y. Adjustable pulleys for gas-machines, &c.	Aug. 19, 1873	512	169	4	194
141, 968	Same. Apparatus for carbureting air	Aug. 19, 1873	512	169	4	194
135, 020	Van Houten, J. H., Newark, N. J., assignor to S. T. Tate, Brooklyn, N. Y., and E. F. Van Houten, N. J. Machine for carbureting air	Jan. 21, 1873	494	158	3	75
145, 768	Van Kannel, T., and G. Elzenhoefer, said Van Kannel assignor to said Elzenhoefer, Cincinnati, Ohio. Hydrant	Dec. 23, 1873	669	218	4	676
135, 302	Van Name, W., and J. A. Wakefield, Chippewa Falls, Wis. Lumber-chute	Jan. 28, 1873	754	243	3	108
143, 265	Van Ness, J. H., Charlotte, N. C. Mitering-machine	Sept. 30, 1873	828	284	4	358
141, 678	Van Nouhuys, I., Albany, N. Y. Machinery for burnishing the heels of boots and shoes	Aug. 12, 1873	251	80	4	163
	Vannuys, H. (See Vannuys, S. and H.)					
135, 178	Vannuys, S. and H., Bethel, Ind. Corn-planter	Jan. 21, 1873	620	202	3	85
137, 739	Vanorman, O., Fond du Lac, Wis. Carpet-stretcher	Apr. 8, 1873	424	130	3	403
143, 206	Vanorman, O., assignor of one-half interest to H. Hamilton, Fond du Lac, Wis. Automatic fan	Sept. 23, 1873	771	265	4	337
141, 679	Van Patten, F., assignor by mesne assignment to self and E. D. Clapp, Auburn, N. Y. Die for making blanks for king-bolts	Aug. 12, 1873	252	80	4	163
141, 680	Same. Die for the manufacture of clip king-bolts	Aug. 12, 1873	253	80	4	163
141, 681	Same. Die for swaging clip king-bolt blanks	Aug. 12, 1873	253	81	4	163
141, 682	Same. Die for the manufacture of fifth-wheel heads	Aug. 12, 1873	254	82	4	164
141, 683	Same. Machine for milling fifth-wheels of vehicles	Aug. 12, 1873	256	82, 83	4	164
136, 565	Van Patten, J. B., Newark, N. J. Gas-illuminator	Mar. 4, 1873	192	63	3	261
139, 692	Vansant, J., San Francisco, Cal. Electrical gas-lighting apparatus	June 10, 1873	233	75	3	644
138, 962	Van Sant, J. W., Le Claire, Iowa. Rudder for vessel	May 13, 1873	442	139	3	544
	Van Sickle, D. (See Hunter & Van Sickle.)					
136, 683	Vanstone, S., North Providence, R. I., assignor to H. Lippitt, C. H. Merriman, and J. T. Rhodes, trustees, Providence, R. I. Fastening for railroad-rail joints	Mar. 11, 1873	305	101	3	279
137, 980	Vanstone, S., Providence, R. I. Combined hanging basket and bird-cage	Apr. 15, 1873	635	200	3	433
140, 801	Van Syckel, S., assignor to self and Gibbs, Sterrett & Co., Titusville, Pa. Refining petroleum	July 15, 1873	409	139	4	61
143, 945	Van Syckel, S., Titusville, Pa. Apparatus and process for treating petroleum	Oct. 21, 1873	510	172	4	440
	Van Valkenburg, E. (See Hill & Van Valkenburg.)					
	Van Valkenburgh, B. (See Schorg & Van Valkenburgh.)					
141, 969	Van Vleck, C., Sidney, Mich. Log-turner	Aug. 19, 1873	513	169	4	194
137, 262	Van Vleck, G. H., Buffalo, N. Y. Counting-register	Mar. 25, 1873	830	273	3	341
139, 282	Van Voorhis, W. B., New York, N. Y. Securing pulleys to shafts	May 27, 1873	762	241	3	590
	Van Wageningen, G., et al. (See Goodrich, A. S., assignor.)					
	Van Wagoner & Williams. (See Bull, J., assignor.)					
6, 459	Van Wert, A. E., Binghamton, N. Y. Baptismal font	Feb. 25, 1873			3	218
140, 975	Van Wert, J. A., and A. Crooley, Elmira, N. Y. Bed-bottom spring	July 15, 1873	574	193	4	74
	Van Wyck, C. (See Lewis, I. B., assignor.)					
136, 684	Van Zandt, W. T., and L. A. Tartiere, New York, N. Y. Fire-proof building-blocks	Mar. 11, 1873	306		3	279
136, 795	Varah, W., New Haven, Ct. Knob-spindle	Mar. 11, 1873	398	132	3	286
138, 455	Varley, F. H., London, England. Portable electrical apparatus	Apr. 29, 1873	1,101	348	3	488

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139,746	Varney, T., assignor to Giant Powder Company & Atlantic Giant Powder Company, San Francisco, Cal. Explosive compound	June 10, 1873	291		3	648
137,158	Vars, W. M., Westerly, R. I. Fire-proof shutter	Mar. 25, 1873	731	243	3	333
137,981	Varwig, H., Cincinnati, Ohio. Faucet	Apr. 15, 1873	635	200	3	433
	Vasaly, L. (See Thompson, A. S., assignor.)					
137,740	Vaughan, E. S., Flatbush, N. Y. Basement-floor	Apr. 8, 1873	424	130	3	403
139,036	Vaughan, G. B., Peoria, Ill. Plow	May 20, 1873	516	163	3	563
7,047	Vaughan, T., Boston, Mass. Corners of glass show-cases (Design)	Dec. 9, 1873	.....	.....	4	615
	Vaughn, J. (See Chamness & Vaughn.)					
	Vaughn, J. A. (See Haws & Vaughn.)					
143,266	Vaughn, J. A., Cuyahoga Falls, Ohio. Balanced valve for hydraulic cranes	Sept. 30, 1873	829	294	4	358
145,373	Vaughn, J. A., and H. B. Camp, Cuyahoga Falls, H. E. Merrill, Akron, Ohio, and C. J. Merrill, Alton, Ill., assignors to Turner, Parks & Company, Cuyahoga Falls, Ohio. Clay-mill	Dec. 9, 1873	298	101	4	622
137,982	Vaughn, J. J., and C. J. Blaney, Boston, Mass. Sad-iron	Apr. 15, 1873	636	200	3	433
7,008	Vedder, N. S., Troy, and T. S. Heister, Lansingburgh, N. Y., assignors to N. S. Vedder, Cooking-stove	Dec. 2, 1873	.....	.....	4	585
7,009	Same.....same.....(Design)	Dec. 2, 1873	.....	.....	4	585
7,010	Same.....same.....(Design)	Dec. 2, 1873	.....	.....	4	585
7,011	Same.....Box-stove.....(Design)	Dec. 2, 1873	.....	.....	4	585
7,012	Same.....Base-burning stove.....(Design)	Dec. 2, 1873	.....	.....	4	585
7,013	Same.....Parlor-stove.....(Design)	Dec. 2, 1873	.....	.....	4	585
7,007	Vedder, N. S., and F. Ritchie, assignors to N. S. Vedder, Troy, N. Y. Cooking-stove (Design)	Dec. 2, 1873	.....	.....	4	585
7,014	Vedder, N. S., and F. Ritchie, Troy, and T. S. Heister, Lansingburgh, N. Y., assignor to N. S. Vedder. Heating-stove (Design)	Dec. 2, 1873	.....	.....	4	585
7,048	Vedder, N. S., and F. Ritchie, assignors to N. S. Vedder, Troy, N. Y. Cooking-stove (Design)	Dec. 9, 1873	.....	.....	4	615
137,263	Venable, D. G., assignor to W. T. Venable, Christiansburgh, Ky. School-desk	Mar. 25, 1873	831	273	3	341
	Venable, W. T. (See Venable, D. G., assignor.)					
142,421	Vennall, J., Boston, Mass. Method of securing letters to stone	Sept. 2, 1873	86	29	4	249
	Vergnes, E. (See Manico, E., assignor.)					
141,526	Verill, W., Elwood, N. J. Thrashing-machine	Aug. 5, 1873	100	31	4	143
	Vermilya, J. H., et al. (See Hunter, G. W., assignor.)					
	Vernon, C., et al. (See Lones, Vernon & Holden.)					
135,868	Veronee, C. B., Athens, Ga. Sewing-machine fan-attachment	Feb. 11, 1873	439	143	3	173
140,324	Vetter, J. C., Indianapolis, Ind. Lady's toilet-cabinet	June 24, 1873	819	{ 259 } { 260 }	3	707
	Victor Sewing-Machine Company. (See Pratt & King, assignors.)					
139,283	Viets, E. B., Boston, Mass. Pantaloon-tree	May 27, 1873	763	242	3	590
144,644	Same.....Steaming and drying apparatus for shaping pantaloons	Nov. 18, 1873	419	140	4	535
	Vinnedge, J. D. (See Coppock, J. F., assignor.)					
139,441	Vinnedge, J. D., Indianapolis, Ind. Machine for cutting out pegs	May 27, 1873	898	289	3	601
143,600	Vinton, J. J., Sharon, Pa. Manufacture of iron from blast-furnace slag	Oct. 14, 1873	186	.....	4	404
136,566	Vintschger, G., New York, N. Y. Picture-nail	Mar. 4, 1873	193	64	3	261
134,826	Violet, F. N., Fond du Lac, Wis. Attachment for sewing-machines	Jan. 14, 1873	312	99	3	45
136,947	Voelckers, T., Boston, Mass. Floor-timber support	Mar. 18, 1873	536	177	3	306
135,179	Vogel, C., New York, N. Y. Machine for cutting files	Jan. 21, 1873	621	{ 202 } { 203 }	3	85
	Vogel, K., Chelsea, Mass. Sewing-machine (Extension)	Oct. 4, 1873	.....	.....	4	353
137,514	Vogler, H., Baltimore, Md. Explosive pile-driver	Apr. 1, 1873	216	66	3	374
136,685	Vogt, J. H., and G. Dietzel, New York, N. Y. Waist-belt	Mar. 11, 1873	306	101	3	279
136,629	Vogt, P. A., Buffalo, N. Y. Door for refrigerators	Mar. 11, 1873	262	88	3	275
	Voll, G. (See McGregor & Voll)					
144,806	Vollrath, J. J., Sheboygan, Wis. Revolving stool or chair	Nov. 18, 1873	550	186	4	546
	Volmar, H. (See Sadler & Volmar.)					
135,390	Von Bolzano, T., Schlan, Austria. Furnace-grate	Jan. 28, 1873	835	269	3	115
143,735	Von Culin, M., assignor by mesne assignment to E. Riedel and J. E. Roebling, Philadelphia, Pa. Machine for forming seamless cans	Oct. 14, 1873	315	105	4	414
145,701	Von Dorn, T. L., assignor to self and A. J. Potter, Omaha, Nebr. Screw-plate	Dec. 16, 1873	598	195	4	658
136,883	Von Ehren, F. A. L., New Orleans, La. Fire-escape	Mar. 18, 1873	481	160	3	302
138,353	Von Kessler, F. W. C., and A. F. Medenwald, Chicago, Ill. Blacking-brush	Apr. 29, 1873	1,011	318	3	481
144,933	Von Phul, H., jr., and J. Mallon, Holly Wood, La. Combined stubble shaver and scraper	Nov. 25, 1873	664	225	4	566
5,482	Von Staden, W. G., Strathroy, Canada. Car-frame (Reissue)	July 8, 1873	369	125	4	50
137,264	Voorhies, L. H., Ypsilanti, Mich. Car-brake	Mar. 25, 1873	832	273	3	341
145,820	Vorce, O. A., Kentland, Ind. Weather-strip	Dec. 23, 1873	708	233	4	679
	Vornbrock, J. H. (See Holt, C., assignor.)					
	Vosburg, A. E. (See Frank, J. H., assignor.)					
	Vose, J. W. (See Wilson, J. W., assignor.)					
	Vose, W. T., Newtonville, Mass. Portable pump (Extension)	Nov. 15, 1873	.....	.....	4	504
141,476	Voss, H., and H. P. Brandt, Davenport, Iowa. Window-mirror	Aug. 5, 1873	60	18	4	140
135,049	Vosseller, J. S., Plainfield, N. J. Compound for paint	Jan. 21, 1873	521	.....	3	77
137,265	Voth, H., Saint Louis, Mo. Car-replacer	Mar. 25, 1873	833	273	3	341
144,878	Votti, C., Newark, N. J. Device for connecting frames of valises, &c.	Nov. 25, 1873	623	211	4	562
145,320	Vreeland, A., Mont Clair, N. J. Cart-loading scoop	Dec. 9, 1873	259	86	4	618
5,237	Vreeland, S., Pottstown, Pa., assignor by mesne assignment to Metallic Suspension-Wheel Company. Carriage-wheel (Reissue)	Jan. 14, 1873	437	139	3	55
136,567	Vreeland, S., assignor to Metallic Suspension-Wheel Company, Pottstown, Pa. Wheel for vehicles	Mar. 4, 1873	193	64	3	261
141,406	Vrooman, A. V., Roxbury, N. Y. Welt-parer	July 29, 1873	1,005	326	4	125
	Vrooman, C., administratrix. (See Vrooman, H. S.)					
139,636	Vrooman, H. S., deceased, by C. Vrooman, administratrix, Boston, Mass. Heel-burnishing machine	June 3, 1873	168	55, 56	3	622
139,637	Vrooman, H. S., deceased, by C. Vrooman, administratrix. Sole-channeling machine	June 3, 1873	169	56	3	623
137,807	Waddell, J. L., Annapolis, Md. Collar button or stud	Apr. 15, 1873	490	153	3	421
	Waddell, L. (See Waddell, W. H. & L., and Lutz.)					
142,970	Waddell, W. H. & L., and J. A. Lutz, Churchville, Va. Car-coupling	Sept. 16, 1873	576	194	4	311
142,304	Waddington, J., New Philadelphia, Ohio. Grain-binder	Aug. 26, 1873	821	272	4	229
144,041	Wade, A. M., Lawrence, Mass. Bobbin-holder for spooling-machines	Oct. 28, 1873	618	204	4	459
139,839	Wade, E., Elizabeth, N. J. Illuminated clock	June 10, 1873	372	115	3	654
145,137	Wade, F. M., San Francisco, Cal. Egg-carrier	Dec. 2, 1873	95	31	4	593
143,736	Wade, O. H., East Bridgewater, Mass. Belt-shifting apparatus	Oct. 14, 1873	316	105	4	414
	Wadsworth, H. C. (See Forehand & Wadsworth.)					
	Wadsworth, J., et al. (See Eames, J. N., assignor.)					
139,093	Wageoner, G. W., assignor to A. R. Cushman, Scotland County, Mo. Washing-machine	May 20, 1873	572	179	3	567

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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134, 949	Waggoner, G., New Kingston, Pa. Cultivator	Jan. 14, 1873	416	133	3	53
138, 302	Wagner, H. E., Dresden, Germany, assignor to J. F. H. Mattullath, Pittsburgh, Pa. Paper	Apr. 29, 1873	969		3	477
	Wagner, J. (See Douglass & Wagner.)					
	Wagner, J., Pittsburgh, Pa. Sausage-stuffer	Mar. 29, 1873	.....	.....	.....	.....
138, 303	Wagner, J. Z., and H. R. Fry, Wabash, Ind. Lathe for turning hubs	Apr. 29, 1873	970	304	3	477
136, 288	Wagner, P., New York, N. Y. Paint-brush	Feb. 25, 1873	831	268	3	230
137, 515	Same..... Brush-socket	Apr. 1, 1873	217	66	3	374
138, 213	Same..... Brush	Apr. 22, 1873	858	272	3	460
135, 455	Wainwright, H. H., Philadelphia, Pa. Gas-apparatus	Feb. 4, 1873	59	19	3	132
	Wait, J. B. (See Scofield, L., assignor.)					
	Wait, O. E. (See Darrow & Wait.)					
138, 214	Wait, W. B., New York, N. Y. Nut-lock	Apr. 22, 1873	858	272	3	460
142, 750	Waite, J., Yarmouth, Me. Car-coupling	Sept. 9, 1873	382	128	4	284
145, 769	Waite, G. W., Philadelphia, Pa. Caster	Dec. 23, 1873	670	218	4	676
	Wakefield, A. B. (See Berryman & Wakefield.)					
137, 266	Wakefield, A. B., and B. A. Berryman, Saint Louis, Mo. Car-wheel	Mar. 25, 1873	833	274	3	341
140, 099	Wakefield, C. A., Pittsfield, Mass. Earth-closet	June 17, 1873	605	191	3	681
	Wakefield, J. A. (See Van Name & Wakefield.)					
141, 477	Wakefield, S. W., Keokuk, Iowa. Wrench	Aug. 5, 1873	61	19	4	140
	Wakefield, W. O. (See Wheeler & Wakefield.)					
	Wakeman, S. (See Broadbooks, P., assignor.)					
140, 325	Walbridge, H. B., Brooklyn, N. Y. Reflector	June 24, 1873	820	260	3	707
5, 238	Walch, B., Frederick, Md. Auger	Jan. 14, 1873	438	139	3	55
	Walden, J. (See Platts & Walden.)					
5, 488	Walden, J., Newark, N. J., assignor of one-half interest to G. Platts. Machinery for goring gaiters	July 15, 1873	591	199	4	76
143, 798	Walden, J., and G. Platts, Newark, N. J. Machine for gumming the edge of elastic shoe-gores	Oct. 21, 1873	387	129	4	430
	Walden, P. (See Anderson, Walden & More.)					
	Walden, W. (See McKinstry & Walden.)					
144, 716	Waldie, S. H., Belmont, Tex. Billiard-table	Nov. 18, 1873	473	160	4	540
138, 963	Waldron, A. T., Waterford, N. Y. Combined stop-cock and check-valve	May 13, 1873	443	139	3	544
138, 058	Waldron, J., and D. G. Moore, Elizabethport, N. J. Machine for pointing spikes	Apr. 22, 1873	727	230	3	450
136, 289	Wale, G., Hoboken, N. J. Shoe-brush	Feb. 25, 1873	832	269	3	230
135, 180	Wales, G., Brooklyn, N. Y. Condenser for steam-engines	Jan. 21, 1873	623	203	3	85
135, 181	Same..... Feed-water heater	Jan. 21, 1873	623	203	3	85
142, 182	Wales, J. H., Marlborough, and H. S. Cushman, Milford, Mass. Railway-rail	Aug. 26, 1873	721	238	4	220
135, 677	Wales, S., New York, N. Y. Umbrella-runner	Feb. 11, 1873	275	87	3	161
137, 516	Wales, S. E., Oxford, assignor to self and J. H. Williams, Warren, N. H. Extension-table	Apr. 1, 1873	217	66	3	374
142, 061	Walker, A. G., and S. Brown, Worcester, Mass. Plowman's boot	Aug. 19, 1873	603	199	4	201
	Walker, A. H., et al. (See Howard, A. F., assignor.)					
137, 040	Walker, A. W. and J. E., Detroit, Mich. Extension step-ladders	Mar. 18, 1873	617	204	3	313
139, 094	Walker, C. L., Charleston, S. C. Case for law blanks	May 20, 1873	572	179	3	567
	Walker, C. W. (See Lewis, G. W., assignor.)					
135, 021	Walker, D., Newark, N. J. Combined office table and bed	Jan. 21, 1873	495	159	3	75
139, 284	Walker, E. A., Minneapolis, Minn. Scroll-saw	May 27, 1873	764	242	3	590
140, 747	Walker, E. A., New Haven, Conn. Joiners' clamp	July 8, 1873	361	122	4	49
142, 361	Walker, E. A., Minneapolis, Minn. Scroll-sawing machine	Sept. 2, 1873	35	13	4	245
139, 935	Walker, E. C., and W. M. Gooding, Newark, N. J. Machine for turning spools	June 17, 1873	463	145	3	609
140, 976	Walker, F., New Orleans, La. Curtain-fixture	July 15, 1873	574	193	4	74
	Walker, G. (See Holmes, J., assignor.)					
139, 345	Walker, G., Whitley's Point, Ill. Rotary churn	May 27, 1873	809	258	3	594
5, 463	Walker, G. A., Boston, Mass., assignor to W. G. Ely, Norwich, Conn. Paper-cutting machine	June 24, 1873	837	266	3	708
	Walker, G. A., Boston, Mass. Machine for cutting paper	Dec. 9, 1873	377	125	4	628
142, 535	Walker, G. S., Erie, Pa. Washing-machine	Sept. 2, 1873	191	62	4	257
144, 373	Walker, I. F., Central Falls, R. I. Manufacture of dolls	Nov. 4, 1873	166	55	4	492
141, 021	Walker, J. A., assignor of two-thirds interest to J. M. Sharpe and W. H. Morrow, Nashville, Tenn. Harrow	July 22, 1873	629	212	4	88
134, 827	Walker, J. C., Washington, D. C. Oil-painting	Jan. 14, 1873	313	.....	3	45
	Walker, J. E. (See Walker, A. W. and J. E.)					
141, 684	Walker, J. H., Grand Rapids, Mich. Horse hay-rake	Aug. 12, 1873	257	83	4	164
142, 422	Walker, J. H., Worcester, Mass. Fire-proof building	Sept. 2, 1873	87	29	4	249
145, 034	Walker, J. T., Albany, N. Y. Ironing-machine	Nov. 25, 1873	754	{ 254 } { 255 }	4	574
142, 971	Walker, O. E., assignor to self and C. F. Stites, Cincinnati, Ohio. Can for paint, &c.	Sept. 16, 1873	576	195	4	311
137, 808	Walker, R., Milford, Mass. Automatic signal for railway-crossings	Apr. 15, 1873	490	153	3	421
145, 374	Walker, R., Harrisville, Ohio. Carriage-spring	Dec. 9, 1873	299	101	4	622
	Walker, R. B. (See Van Dervort & Walker.)					
144, 808	Walker, R. K., Clarrington, Ohio. Miners' pick	Nov. 18, 1873	551	187	4	546
134, 620	Walker, T. G., and H. H. Holbrook, New York, N. Y. Paddle-wheel	Jan. 7, 1873	111	37	3	16
135, 499	Walker, W., Fort Bridger, Wyo. Railway snow-plow	Feb. 4, 1873	96	30	3	135
141, 407	Walker, W., Brooklyn, assignor to G. H. Wooster, New York, N. Y. Plating-attachment for sewing-machines	July 29, 1873	1,006	327	4	125
141, 610	Same..... Plating-attachment for sewing-machines	Aug. 5, 1873	175	56	4	149
144, 807	Same..... Trimming	Nov. 18, 1873	550	187	4	546
134, 950	Walker, W. E., Albion, Iowa. Truck for moving buildings	Jan. 14, 1873	417	133	3	53
5, 227	Walker, W. J., Dorset, Ill. Seed-separator	Jan. 7, 1873	217	70	3	24
	Walker, W. L., et al. (See Rogers & Devoe, assignors.)					
	Same..... (See Rogers, T., assignor.)					
138, 964	Walker, W. T., Fontenoy Mills, Ga. Cultivator	May 13, 1873	443	129	3	544
141, 611	Walker, W. V., Dresserville, N. Y. Mowing-machine	Aug. 5, 1873	176	56	4	149
	Walker, Z. (See Ash & Walker.)					
135, 182	Walkington, W., Leeds, England. Cutter-holder for planing-machines	Jan. 21, 1873	624	204	3	86
140, 100	Wall, P., assignor to self and J. S. Hall, Allegheny, Pa. Metallic roofing	June 17, 1873	606	191	3	681
135, 183	Wall, W. H., assignor of one-half interest to H. W. Garrison, Elbridge, N. Y. Potato-digger	Jan. 21, 1873	625	204	3	86
	Wallace & Sons. (See Doolittle, J. H., assignor.)					
146, 112	Wallace, I. C., and J. W. Andrews, Detroit, Mich. Car-starter	Dec. 30, 1873	990	320	4	712
143, 043	Wallace, J. F., Pittsburgh, Pa. Balanced slide-valve for steam-engines	Sept. 23, 1873	643	220	4	327
	Wallace, W. (See Luce, S., assignor.)					
141, 970	Wallace, W., Syracuse, N. Y. Harvester	Aug. 19, 1873	514	169	4	194
143, 601	Wallace, W. V., Boston, Mass. Surface-coating to hard soap	Oct. 14, 1873	127	.....	4	404
	Wallace, W. W. (See Strickler, J., assignor.)					
	Waller, J. C. (See Cohen & Waller.)					
135, 254	Wallis, H., Saint Louis, Mo. School-satchel	Jan. 28, 1873	717	229	3	105

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139, 095	Wallis, J. N. and T., Fleming, N. Y. Glass coffin.....	May 20, 1873	573	180	3	567
	Wallis, T. (See Wallis, J. N. and T.)					
144, 169	Walmer, J., Ludlow, Ky. Oyster and other dredges.....	Oct. 28, 1873	726	242	4	468
143, 393	Walsh, C., Newark, N. J. Capped nail.....	Sept. 30, 1873	943	319	4	367
141, 839	Walsh, J., Philadelphia, Pa. Valve-cock.....	Aug. 12, 1873	391	128	4	174
135, 678	Walsh, J. A., Mount Hope, Wis. Band-cutters' platform for thrashing-machine.....	Feb. 11, 1873	276	87	3	161
138, 215	Walsh, J. E., New York, N. Y. Derrick.....	Apr. 22, 1873	859	272	3	460
136, 568	Walsh, P. J., and W. J. Taylor, Oil City, Pa. Brick-kiln.....	Mar. 4, 1873	194	64	3	261
138, 965	Walter, H. E., Richfield Springs, N. Y. Electrical burglar-alarm.....	May 13, 1873	444	139	3	544
140, 748	Walter, J. F., jr., Brooklyn, N. Y. Sealing paint-cans.....	July 8, 1873	361	122	4	49
142, 183	Walter, W., Arkada, Wash. Hydraulic motor.....	Aug. 26, 1873	721	238	4	220
	Walter, W. G., et al. (See Johnson, G. F., assignor.)					
135, 456	Walters, A. B., assignor to self and C. Saunders, Philadelphia, Pa. Grinding, scouring, and polishing machine.....	Feb. 4, 1873	60	19	3	132
	Walters, C., et al. (See Gearing, C., assignor.)					
137, 640	Walters, G. C., Philadelphia, Pa. Sewing-machine.....	Apr. 8, 1873	329	102	3	395
136, 796	Walters, S., Dallas City, Ill. Eyelet for harness-traces.....	Mar. 11, 1873	398	132	3	286
139, 346	Walther, J., Brooklyn, N. Y., assignor to C. B. Cotterell, Westerly, R. I. Automatic valve-opener for air-springs.....	May 27, 1873	809	258	3	594
136, 395	Walton, B. F., Jersey City, N. J. Head-rest for beds.....	Mar. 4, 1873	38	14	3	248
	Walton Brothers. (See Devlan, P. S., assignor.)					
142, 536	Walton, G., assignor to Post & Co., Cincinnati, Ohio. Combined high and low water indicator.....	Sept. 2, 1873	192	62	4	257
	Walton, J. J. (See Barrett, E. A., assignor.)					
	Same..... (See Bell, T. G., assignor.)					
	Walton, J. J., et al. (See Manning, D. R., assignor.)					
	Walton, J. J. (See Merritt, J. C., assignor.)					
140, 448	Walton, J. J., New York, N. Y. Naval store-room or coach-lamp.....	July 1, 1873	87	30	4	15
145, 918	Same..... Pump.....	Dec. 23, 1873	797	261	4	686
145, 919	Same..... Fair leader for ship's rigging.....	Dec. 23, 1873	798	261	4	686
136, 290	Walton, J. J., and E. A. Barrett, New York, N. Y. Swinging candlestick for ships.....	Feb. 25, 1873	832	269	3	230
142, 537	Walton, N. W., and J. L. Cunningham, said Walton assignor to said Cunningham, Pennsborough, W. Va. Bee-hive.....	Sept. 2, 1873	193	62	4	257
138, 966	Walton, W., and J. T. Fallows, Denton, England. Rolling wire.....	May 13, 1873	445	140	3	544
	Walton, W. E. (See Knowlton, J. L., assignor.)					
	Walton, W. M., et al. (See Manning, D. R., assignor.)					
141, 022	Walton, W. R., Freeport, Ill. Washing-machine.....	July 22, 1873	629	212	4	88
134, 951	Watts, F., Watertown, N. Y. Rock-drilling machine.....	Jan. 14, 1873	418	133	3	53
138, 456	Walty, M., Buffalo, N. Y. Device for boring and turning gas-fittings.....	Apr. 29, 1873	1, 102	348	3	488
141, 612	Same..... Chuck for holding pipe-fittings.....	Aug. 5, 1873	177	56	4	149
141, 299	Walworth, C. C., Boston, Mass. Screw-cutting machine.....	July 29, 1873	898	294	4	117
144, 374	Same..... Machine for tapping gas and water fittings.....	Nov. 4, 1873	167	56	4	492
135, 022	Wamsley, J. N., Galena, Ohio. Harrow.....	Jan. 21, 1873	496	159	3	75
5, 515	Wands, J. C., Nashville, Tenn. Car-roof..... (Reissue).....	July 29, 1873	1, 023	{ 331 } { 332 }	{ 4 }	126
136, 569	Same..... same.....	Mar. 4, 1873	195	64, 65	3	261
142, 062	Same..... Railway-car.....	Aug. 19, 1873	603	199	4	201
137, 983	Wanzer, R. M., Hamilton, Canada. Sewing-machine stand.....	Apr. 15, 1873	637	201	3	433
	Ward, A., Altoona, Pa. Body-bolster for railway-cars..... (Extension).....	June 21, 1873	204	66	4	258
5, 560	Same..... same..... (Reissue).....	Sept. 2, 1873	204	66	4	258
136, 111	Ward, G. H., Middletown, Conn. Boot and shoe fastening.....	Feb. 18, 1873	663	216	3	205
139, 936	Ward, H. M., and G. E. Dolton, Monee, Ill. Book-mark.....	June 17, 1873	465	146	3	669
	Ward, I. M., et al. (See Buckner, C., assignor.)					
	Ward, J. (See Davenport & Ward.)					
134, 952	Ward, L. F., Marathon, N. Y. Spool-holder.....	Jan. 14, 1873	418	134	3	54
135, 609	Same..... Spool-stand and thread-cutter.....	Feb. 4, 1873	206	64	3	143
143, 478	Ward, R. F., Senatobia, Miss. Wood fence.....	Oct. 7, 1873	67	23	4	386
	Ward, S. (See McGarrah, J. H., assignor.)					
143, 946	Ward, W., New York, N. Y. Construction of houses.....	Oct. 21, 1873	512	172	4	440
	Ward, W. E., Port Chester, N. Y. Machine for making nuts..... (Extension).....	July 2, 1873	264	86	3	41
134, 777	Same..... Screw-cutting die.....	Jan. 14, 1873	264	86	3	41
136, 473	Ward, W. H., Auburn, N. Y. Manufacture of coil-springs.....	Mar. 4, 1873	105	35	3	254
139, 693	Same..... Valve or cut-off for cupola and other furnaces.....	June 10, 1873	240	75	3	644
134, 953	Ward, W. S., New York, N. Y. Ejecting-apparatus for bottles.....	Jan. 14, 1873	419	134	3	54
136, 112	Ward, W. S., assignor to H. D. Smith & Co., Plantsville, Conn. Tool for milling carriage-shaft eyes.....	Feb. 18, 1873	664	217	3	205
137, 517	Same..... Machine for forming carriage-clips.....	Apr. 1, 1873	218	67	3	374
145, 604	Ward, Z. A., Pittsfield, Mass. Carpet stretcher and tacker.....	Dec. 16, 1873	514	169	4	651
6, 376	Wardin, R. B., Philadelphia, Pa. Handle of kettle-cover..... (Design).....	Jan. 28, 1873	665	226	4	566
144, 934	Wardwell, J. B., Lawrence, Mass. Adjustable bench-vise.....	Nov. 25, 1873	665	226	4	566
141, 245	Wardwell, S. W., jr., assignor of one-half interest to G. W. Shaw, Saint Louis, Mo. Sewing-machine.....	July 29, 1873	850	{ 277 } { 278 }	{ 4 }	113
137, 396	Ware, C. F., San Francisco, Cal. Process for removing paper from walls.....	Apr. 1, 1873	105	35	3	365
139, 096	Ware, E., Norfolk, Mass. Steam-engine governor-valve.....	May 30, 1873	573	180	3	567
142, 305	Ware, J., West Swanzy, N. H. Sash-holder.....	Aug. 26, 1873	821	272	4	229
136, 570	Ware, J. L., Mantorville, Minn., assignor to S. E. Ware, Waupun, Wis. Carriage running-gear.....	Mar. 4, 1873	196	65	3	261
134, 714	Ware, J. W. and M. L., Philadelphia, Pa. Process of bleaching, &c., dried natural flowers.....	Jan. 7, 1873	200	.....	3	22
	Ware, M. L. (See Ware, J. W. and M. L.)					
142, 538	Ware, P., jr., Boston, Mass. Manufacture of boots and shoes.....	Sept. 2, 1873	194	63	4	257
142, 539	Same..... Last for boots and shoes.....	Sept. 2, 1873	195	63	4	257
	Ware, S. E. (See Ware, J. L., assignor.)					
145, 465	Warfield, E. A., Howard County, and W. F. Elmer, Baltimore, Md. Repairing railway-tracks.....	Dec. 9, 1873	378	125	4	628
142, 063	Waring, J. T., Yonkers, N. Y. Removing vegetable-fiber from felted fabrics.....	Aug. 19, 1873	604	.....	4	201
142, 064	Same..... Dyeing felt hats and caps.....	Aug. 19, 1873	604	.....	4	201
142, 658	Warinner, W., Creelsborough, Ky. Car-brake.....	Sept. 9, 1873	304	100	4	278
144, 297	Warinner, W., and W. L. D. Johnson, Creelsborough, Ky. Link-guide for car-couplings.....	Nov. 4, 1873	104	35	4	487
144, 809	Warker, T., New York, N. Y. Apparatus for drawing effervescent liquids.....	Nov. 18, 1873	551	187	4	546
137, 397	Warne, M., Philadelphia, Pa. Strap for street-cars.....	Apr. 1, 1873	105	34	3	365
5, 366	Warner, A., Belvidere, N. J., assignor by mesne assignment to E. Hall & Co. Hub for vehicles..... (Reissue).....	Apr. 22, 1873	877	277	3	462
140, 101	Warner, B. W., Rome, assignor to self and A. E. Smith, Utica, N. Y. Stave-machine.....	June 17, 1873	606	191	3	681

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145, 321	Warner, C. E., Burlington, Kan. Hay-loader	Dec. 9, 1873	260	86	4	619
145, 770	Warner, D., assignor to J. A. Sevey, Boston, Mass. Whalebone-splitting machine	Dec. 23, 1873	670	219	4	676
135, 050	Warner, D. C., Chicago, Ill. Cherry-stoner	Jan. 21, 1873	521	168	3	77
	Warner, F. F., et al. (See Morrison, J. C., assignor.)					
141, 971	Warner, F. K., Paris, France. Advertising-lamp	Aug. 19, 1873	515	170	4	194
145, 821	Warner, H. K., and C. E. Smith, Rochester, Minn. Curtain-fixture	Dec. 23, 1873	709	233	4	679
	Warner, J. H., et al. (See Bushfield, S. B., assignor.)					
	Same					
134, 574	Warner, J. W., Oneida, N. Y. Fire-proof safe	Jan. 7, 1873	69	21	3	12
134, 575	Same	Jan. 7, 1873	70	22	3	12
144, 935	Warner, M. E., and S. W. Kingsley, Hatfield, Mass. Road-scraper	Nov. 25, 1873	666	226	4	566
136, 686	Warner, N. C., Hopewell Furnace, Mo. Wash-boiler attachment	Mar. 11, 1873	307	101	3	279
144, 239	Warner, P., Gilead, Mich. Dropping-platform for harvesters	Nov. 4, 1873	62	19	4	483
	Warner, W., & Co. (See Williams, T. G., assignor.)					
137, 641	Warner, W. E., Syracuse, N. Y. Press	Apr. 8, 1873	330	102	3	395
136, 291	Warren, A. C., Concord, N. H. Damper for hot-air furnaces	Feb. 25, 1873	833	269	3	230
139, 216	Warren, C. C., Earl, Ill. Railway-scale platform	May 20, 1873	685	216	3	576
138, 967	Warren, E. A., Brooklyn, N. Y. Printer's chase	May 13, 1873	446	140	3	544
134, 715	Warren, E. W., Cambridge, N. Y. Sash-holder	Jan. 7, 1873	200	65	3	22
	Warren, H. H. (See Chapman, N. D., assignor.)					
138, 059	Warren, H. H., Buffalo, N. Y. Lifting-jack	Apr. 22, 1873	758	230	3	450
	Warren, J. B. (See Bullard, I., assignor.)					
143, 861	Warren, J. L., and J. W. Adderley, Detroit, Mich. Picture-frame	Oct. 21, 1873	444	148	4	434
143, 107	Warren, O. H., Baldwinsville, N. Y. Oil-can	Sept. 23, 1873	693	238	4	331
136, 194	Warren, O. J., Des Moines, Iowa. Corn-husking implement	Feb. 25, 1873	750	242	3	224
142, 065	Warren, R. R., Raleigh, N. C. Fire-proof cotton-lint room	Aug. 19, 1873	605	199	4	201
140, 175	Warren, W. P., Serena, Ill. Road-scraper	June 24, 1873	691	217	3	696
136, 884	Warriner, F., Troy, N. Y. Stove-window	Mar. 18, 1873	482	160	3	302
143, 547	Warriner, F., assignor to S. S. Huntington, Troy, N. Y. Extension for stove-flues	Oct. 7, 1873	134	44, 45	4	391
135, 951	Warriner, R. H., Toledo, Ohio. Trace-carrier	Feb. 18, 1873	524	171	3	194
140, 561	Warsop, G., Nottingham, England, assignor to J. B. Wayne, Detroit, Mich. Pipe-wrench	July 1, 1873	189	63	4	23
5, 228	Warth, A., assignor to E. Faber, Stapleton, N. Y. Machine for cutting lead-pencils	Jan. 7, 1873	217	70	3	24
	(Reissue)					
137, 041	Warth, A., Stapleton, N. Y. Machine for piling textile fabrics	Mar. 18, 1873	618	204, 205	3	313
	Same					
137, 518	Same	Apr. 1, 1873	219	67	3	374
144, 240	Warwick, W., and H. C. Duggan, Pittsburgh, Pa. Car-brake	Nov. 4, 1873	63	19	4	483
138, 107	Washbourne, F., Brooklyn, N. Y. Button	Apr. 22, 1873	766	243	3	453
5, 516	Washburn, A., Medina, Ohio. Paper-folding machine	July 29, 1873	1, 024	332	4	127
141, 742	Same	Aug. 12, 1873	301	99	4	168
143, 267	Washburn, A. K., Bridgewater, Mass. Jack for holding shoes	Sept. 30, 1873	830	285	4	358
5, 625	Washburn, B. D., Boston, Mass. Shutter-fastening	Oct. 21, 1873	535	176	4	442
	Washburne, G. (See Lamarre, A., assignor.)					
135, 610	Wassell, H. A., Stourbridge, England. Machine for marking designs on glass, &c.	Feb. 4, 1873	206	64, 65	3	143
136, 571	Wasson, C. W., Friendship, N. Y. Mortar-mixer	Mar. 4, 1873	197	65	3	261
135, 500	Wasson, W. P. F. Powers, and G. W. Dungan, Genoa, Nevada. Harvester-cutter	Feb. 4, 1873	97	31	3	135
143, 648	Wate, S. N., jr., assignor to self and P. J. Adams, Danville, Pa. Pitman-rod	Oct. 14, 1873	229	77	4	408
	Waterbury Button Company. (See Smith, J. R., assignor.)					
138, 968	Waterbury, C. A., New York, N. Y. Railway-car brake-wheel	May 13, 1873	446	140	3	544
144, 488	Waterbury, C. G., New York, N. Y. Machine for removing snow and ice from roadways and streets	Nov. 11, 1873	274	93	4	512
145, 892	Same	Dec. 23, 1873	709	233	4	679
144, 003	Waterbury, E. D., Mason City Iowa. Extension-rule	Oct. 28, 1873	588	195	4	456
137, 115	Waterhouse, A. G., assignor to Waterhouse Manufacturing Company, Portage, Wis. Mechanical movement	Mar. 25, 1873	695	231	3	331
138, 108	Waterhouse, A. G., assignor of six-tenths interest to J. S. and M. Nichols, San Francisco, Cal. Horse-power	Apr. 22, 1873	766	244	3	453
	Waterhouse Manufacturing Company. (See Waterhouse, A. G.)					
143, 479	Waterman and Mayer. (See Waterman, J., assignor.)					
5, 355	Waterman, J., assignor to Waterman & Mayer, New York, N. Y. Corset	Oct. 7, 1873	67	23	4	386
134, 954	Waterman, J. S., Boston, Mass. Corpse-preserving case	Apr. 15, 1873	655	206	3	435
	(Reissue)					
138, 060	Waters, B. F., Garrettsville, Ohio, assignor to F. W. Andrews, Titusville, Pa. Pitman-connection for harvesters	Jan. 14, 1873	420	134	3	54
	Waters, C. H., Groton, Mass. Apparatus for drying painted wire-cloth	Apr. 22, 1873	728	230	3	450
137, 741	Waters, E., executor. (See Littlejohn, H.)					
137, 984	Waters, H., Northbridge, Mass. Machine for rolling scythes	Apr. 8, 1873	425	131	3	403
	Same	Apr. 15, 1873	637	201	3	433
138, 216	Waters, H., Boston, Mass. Machine for rolling scythes	Apr. 22, 1873	860	272, 273	3	460
143, 044	Waters, J., West Sutton, Mass. Toy-whistle	Sept. 23, 1873	644	221	4	327
6, 894	Waters, J. M., Cincinnati, Ohio. Chair	Sept. 23, 1873			4	322
140, 562	Waters, Z. D., Brookville, Md. Corn-planter	July 1, 1873	189	63, 64	4	23
139, 694	Watkeys, H., Syracuse, N. Y. Throttle-valve for locomotive and other engines	June 10, 1873	242	75, 76	3	644
	Watkins, A. H. (See Benson & Watkins.)					
	Watkins, E. T. (See Burtis, P. T., assignor.)					
	Same					
	(See Heywood, L., assignor.)					
6, 986	Watkins, T. (See Howard, B., assignor.)					
144, 810	Watkinson, G., assignor to L. Candee & Co., New Haven, Conn. Overshoe. (Design) ..	Nov. 4, 1873			4	478
146, 113	Same	Nov. 18, 1873	552	187	4	546
	Watrous, C. R., assignor to self and J. Watrous, jr., Mystic, Conn. Nut-lock	Dec. 30, 1873	992	320	4	712
	Watrous, J., jr. (See Watrous, C. R., assignor.)					
145, 920	Watson, A., Washington, D. C. Extinguishing fires in high buildings	Dec. 23, 1873	798	262	4	686
136, 474	Watson, C., White Cloud, Kans. Washing-machine	Mar. 4, 1873	106	35	3	254
	Watson, C. S. (See Jackson, T. R. and A. C., and Watson.)					
143, 649	Watson, D., Mexico, Mexico. Evaporating-pan	Oct. 14, 1873	230	77	4	408
134, 828	Watson, D. R., Moweaqua, Ill. Clothes-dryer	Jan. 14, 1873	313	99	3	45
141, 190	Watson, F. M., Columbia, Tenn. Carriage	July 22, 1873	787	257	4	100
	Watson, J. (See Bailey & Watson.)					
	Same					
	(See Bailey, F. L., assignor.)					
140, 977	Watson, J., et al. (See Chapman, J. L., assignor.)					
	Watson, J., Philadelphia, Pa. Step and step-box	July 15, 1873	575	193	4	74
	Watson, J. H. (See Stevens & Watson.)					
5, 315	Watson, J. M., Sharon, Mass., assignor to self and H. A. Lothrop. Wooden shank for boots and shoes	Mar. 4, 1873	218	72	3	363
	(Reissue)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
135, 184	Watson, J. R., Allegheny City, Pa. Sash-holder	Jan. 21, 1873	626	204	3	86
138, 969	Watson, P. B., assignor of two-thirds interest to T. West, Belvidere, N. J. Washing-machine	May 13, 1873	447	140	3	544
139, 442	Watson, S. (See Ogborn, H., assignor.)					
143, 108	Watson, W. A., Beverly, Mass. Machine for staking, glassing, and perching skins	May 27, 1873	898	289	3	601
134, 716	Watson, W. B., Somerville, Tenn. Shirt	Sept. 23, 1873	694	238	4	331
143, 548	Watson, W. M., Tonica, Ill. Plow	Jan. 7, 1873	201	65	3	22
	Same.....Furnace for tempering castings, &c.	Oct. 7, 1873	136	45	4	391
140, 563	Watt, D. M., et al. (See Kinzer, J., assignor.)					
141, 972	Watt, G., Richmond, Va. Harrow	July 1, 1873	191	64	4	24
139, 443	Watteau, J., Antwerp, Belgium. Machinery for pulling wool	Aug. 19, 1873	515	170	4	194
138, 718	Wattendorf, K. A., New York, N. Y. Tool for inserting and withdrawing lancets	May 27, 1873	899	290	3	601
144, 004	Wattles, J. H., Battle Creek, Mich. Table	May 6, 1873	226	70	3	516
144, 042	Wattles, J. W., Canton, Mass. Spinning-ring	Oct. 28, 1873	588	195	4	456
136, 630	Same.....Suspenders	Oct. 28, 1873	619	205	4	459
135, 391	Watts, D. S., Canton, Miss. Portable-fence	Mar. 11, 1873	262	88	3	275
135, 185	Way, C. G., Boston, Mass. Funnel	Jan. 28, 1873	836	270	3	115
137, 116	Way, T. R., Springfield, Ohio. Measuring-wheel	Jan. 21, 1873	627	214	3	86
141, 613	Way, T. R., assignor of one-half interest to W. H. Reeves, Springfield, Ohio. Mill-pick	Mar. 25, 1873	696	231	3	331
	Way, T. R., Springfield, Ohio. Millstone-pick	Aug. 5, 1873	178	57	4	149
	Wayne Agricultural Company. (See Fulghum & Lawrence, assignors.)					
	Same.....(See Fulghum, J. P., assignor.)					
143, 737	Wayne, J. B. (See Warsop, G., assignor.)					
5, 290	Weagant, H. L., assignor of two-thirds interest to S. B. Fell and R. Lyle, Morrisburg, Canada. Splint-plane	Oct. 14, 1873	317	106	4	414
	Weatherhead, O. E., Ashland, Mass., assignor to A. A., G. L., and S. W. Cooke. Dividers	Feb. 18, 1873	685	221	3	206
137, 580	Weaver, A. F. (See Bundy, N. H., assignor.)					
143, 045	Weaver, H. B., Hartford, Conn. Water-wheel	Apr. 8, 1873	281	87	3	391
142, 879	Same.....Governor-valve	Sept. 23, 1873	645	221	4	327
	Weaver, J., Tipton, Iowa. Stove-pipe joint	Sept. 16, 1873	469	169	4	305
	Weaver, J. S. (See Schooler, J. E., assignor.)					
141, 904	Weaver, J. W. (See Ansley & Weaver.)					
145, 075	Weaver, T., assignor to H. C. Deming, Harrisburgh, Pa. Sash-holder	Aug. 19, 1873	464	151	4	190
145, 375	Weaver, T., Harrisburgh, Pa. Spherical-gear or universal-joint	Dec. 2, 1873	31	10	4	588
142, 824	Weaver, W., Burlington, Vt. Shaving-conductor for planing-machines	Dec. 9, 1873	300	101	4	622
	Weaver, W., Phoenixville, Pa. Rock-drill	Sept. 16, 1873	452	153	4	301
	Webb, B. (See Burch & Webb.)					
	Webb, H., Chicago, Ill. Railway-bar					
	Webb, H. H., et al. (See La Grove, W. A. P., assignor.)					
143, 480	Webb, J. (See Perry & Webb.)					
	Webb, L. D., Greenville, Cal. Ore-stamp	Oct. 7, 1873	68	24	4	386
	Webb, R. L. (See Turnbull & Webb.)					
137, 159	Same.....same					
138, 771	Webb, R. L., assignor to the Russell and Erwin Manufacturing Company, New Britain, Conn. Reversible knob-latch	Mar. 25, 1873	732	243	3	333
141, 527	Webb, T., Freeport, Ill. Binder's attachment for harvesters	May 13, 1873	282	87	3	530
143, 046	Webb, T., Elyria, Ohio. Straw-cutter	Aug. 5, 1873	101	31	4	143
143, 268	Webber, A., Lynn, Mass. Thread-cutting mechanism for sewing-machines	Sept. 23, 1873	646	221	4	327
141, 840	Webber, D., Houlton, Me. Twine-holder	Sept. 30, 1873	830	285	4	358
140, 564	Webber, W. J., Hollister, Cal. Hay and grain loader	Aug. 12, 1873	392	128	4	174
145, 138	Weber, A., Newark, N. J. Caster-bottle	July 1, 1873	191	64	4	24
137, 985	Same.....same	Dec. 2, 1873	95	31	4	593
143, 207	Weber, A. M., Oshkosh, Wis. Corset	Apr. 15, 1873	639	201	3	433
134, 717	Weber, J., New York, N. Y. Blind-stop	Sept. 23, 1873	772	266	4	337
144, 936	Weber, J., and W. C. Siefert, Lancaster, Pa. Machine for cutting up fat meats for lard-rendering	Jan. 7, 1873	201	65	3	22
45, 823	Weber, J. E., and P. Knutson, La Crosse, Wis. Coffee-pot	Nov. 25, 1873	667	226	4	566
6, 339	Weber, M. (See Anschutz, Slidel & Weber.)					
6, 796	Weber, T. A., Philadelphia, Pa., assignor to A. L. Runyon. Sewing-machine	Dec. 23, 1873	710	234	4	679
	Webster, A. (See Jaycox & Webster.)					
	Webster, A., jr., assignor to C. M. Bailey, New York, N. Y. Carpet	Jan. 7, 1873			3	7
	Webster, A. T., assignor to New Brunswick Carpet Company, New Brunswick, N. J. Carpet					
6, 797	Same.....same	Aug. 5, 1873			4	135
138, 109	Same.....same	Aug. 5, 1873			4	135
139, 444	Webster, F., Brooklyn, N. Y. Wood-finishing compounds or oils	Apr. 22, 1873	767		3	453
137, 742	Webster, G., jr., and J. F., Hamilton City, Canada. Sewing-machine	May 27, 1873	899	290	3	601
139, 217	Webster, J., Birmingham, England. Apparatus for converting iron into steel	Apr. 8, 1873	426	131	3	403
137, 267	Webster, J., Charlestown, Mass. Cake-cutter	May 20, 1873	686	216	3	577
	Webster, J. and J. H., Boston, Mass., assignors to selves and L. D. Hawkins, Stoneham, Mass. Differential-gearing for hoisting-apparatus, &c	Mar. 25, 1873	834	274	3	341
6, 551	Webster, J. F. (See Webster, G., jr., and J. F.)					
6, 552	Webster, J. H. (See Webster, J. and J. H.)					
6, 553	Webster, J. T., assignor to J. and J. Dobson, Philadelphia, Pa. Carpet	Apr. 1, 1873			3	357
6, 554	Same.....same	Apr. 1, 1873			3	357
6, 738	Same.....same	Apr. 1, 1873			3	357
6, 739	Same.....same	Apr. 1, 1873			3	357
6, 740	Same.....same	July 1, 1873			4	7
6, 824	Same.....same	July 1, 1873			4	7
139, 037	Same.....same	July 1, 1873			4	8
146, 036	Same.....same	Aug. 19, 1873			4	185
135, 303	Webster, M. L., Albany, N. Y. Door-spring	May 20, 1873	516	163	3	563
141, 300	Webster, W., East Jaffrey, N. H. Sole-edge trimmer	Dec. 30, 1873	919	298	4	706
136, 797	Wechsler, A., New York, N. Y. Ironing-table	Jan. 28, 1873	754	243	3	108
	Weed, A., Boston, Mass. File-cutting machine	July 29, 1873	898	295	4	117
136, 113	Weeden, J. B., assignor to self and M. M. Johnson, Stafford, Conn. Wrench	Mar. 11, 1873	399	132	3	286
	Weeden, W. N. (See Hallas & Weeden.)					
145, 702	Weeden, W. N., assignor to Benedict and Burnham Manufacturing Company, Waterbury, Conn. Lamp-burner	Feb. 18, 1873	664	217	3	205
141, 301	Same.....Process of making lamp-shade supports	Dec. 16, 1873	599	196	4	658
145, 703	Weeke, C., Saint Charles, Mo. Current-wheel	July 29, 1873	900	295	4	117
	Weeks, A., Washington, D. C. Combined secretary, wardrobe, and bedstead	Dec. 16, 1873	600	196	4	658

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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139, 218	Weeks, H. T. (<i>See</i> Cook, G. W., assignor.)					
135, 457	Wehrle, H., Hampton, Pa. Thrashing-machine	May 20, 1873	687	216	3	577
144, 425	Wehrle, E. R., Pittsburgh, Pa. Top-plate for cooking-stove	Feb. 4, 1873	61	19	3	132
136, 475	Weibel, J. H., Geneva, Switzerland. Railway-car heater	Nov. 11, 1873	224	75	4	508
142, 133	Weich, J., New York, N. Y. Propelling-mechanism for vessels	Mar. 4, 1873	106	35	3	254
	Weicke, E., Philadelphia, Pa. Cutter-head for drilling-machines	Aug. 26, 1873	682	224	4	217
143, 947	Weideman, J. (<i>See</i> Kopping & Weideman.)					
146, 037	Weil, E., assignor to Stern & Co., New York, N. Y. Overalls	Oct. 21, 1873	512	172	4	440
146, 114	Weil, L., New York, N. Y. Cotton-bale tie	Dec. 30, 1873	919	298	4	706
138, 354	Weimer, P. L., Lebanon, Pa. Roof-truss	Dec. 30, 1873	993	320	4	712
137, 986	Weinberger, K., Milwaukee, Wis. Machine for gumming saws	Apr. 29, 1873	1,011	318	3	481
	Weinman, G. M., Columbus, Ohio. Piston-valve for steam-engines	Apr. 15, 1873	639	201	3	433
139, 840	Weirick, S., and H. Lathrope, Warsaw, Ind. Pump and fire-engine	June 10, 1873	373	116	3	654
146, 038	Weis, W., Saint Paul, Minn. Egg-carrier	Dec. 30, 1873	920	298	4	706
139, 638	Weisker, B., New York, N. Y. Berth for vessels	June 3, 1873	170	56	3	623
140, 978	Same. Oscillating cabin for vessels	July 15, 1873	576	194	4	74
141, 614	Same. Oscillating berth for vessels	Aug. 5, 1873	179	57	4	150
138, 825	Weiss, A. R., Brooklyn, N. Y. Machine for milling pipe-tips	May 13, 1873	329	101	3	534
136, 114	Weiss, R., Brooklyn, N. Y. Hook	Feb. 18, 1873	665	217	3	205
144, 170	Weisz, A. R., Brooklyn, N. Y. Scarf-clasp	Oct. 28, 1873	726	243	4	468
142, 880	Welbourn, J. M., Caledonia, Ohio. Explosive engine	Sept. 16, 1873	496	169	4	305
	Welch, A. T., <i>et al.</i> (<i>See</i> Clough, T., assignor.)					
5, 346	Welch, E. B. (<i>See</i> Anders, G. L., assignor.)					
	Welch, E. P., assignor to self, J. H. R. W., & H. P. Welch and J. A. Maloney, Georgetown, D. C. Middlings-purifier	Apr. 1, 1873	229	70	3	375
135, 952	Same. same	Feb. 18, 1873	524	171	3	194
135, 953	Same. same	Feb. 18, 1873	525	172	3	194
134, 955	Welch, G. W., Fort Wayne, Ind. Bushing for piston-rods, &c.	Jan. 14, 1873	420	134	3	54
	Welch, H. H. (<i>See</i> Sheldon, N. P., assignor.)					
	Welch, H. P., <i>et al.</i> (<i>See</i> Welch, E. P., assignor.)					
	Same. same. (Reissue.)					
	Welch, J. C., <i>et al.</i> (<i>See</i> Moloney, J., assignor.)					
	Welch, J. H., <i>et al.</i> (<i>See</i> Welch, E. P., assignor.)					
	Same. same. (Reissue.)					
138, 719	Welch, L. S., Canaan, N. H. Fly-switch	May 6, 1873	227	71	3	516
141, 246	Welch, P., assignor by mesne assignment to D. T. Welch, Saint Louis, Mo. Hoop-cutting machine	July 29, 1873	852	278	4	113
	Welch, R. W., <i>et al.</i> (<i>See</i> Welch, E. P., assignor.)					
	Same. same. (Reissue.)					
138, 720	Welch, T., Philadelphia, Pa. Automatic fan	May 6, 1873	228	71	3	516
139, 984	Welch, W. H., Bloomington, Ill. Coffee-roaster	June 17, 1873	499	158	3	672
	Welch, W. P., <i>et al.</i> (<i>See</i> Pettie, F. W., assignor.)					
141, 302	Weld, C. J., Brattleborough, Vt. Water-regulator for boilers	July 29, 1873	901	295	4	117
141, 841	Weld, M. C., Closter, N. J. Window-blind	Aug. 12, 1873	393	128	4	174
137, 743	Welding, C., New York, N. Y. Metallic lathing	Apr. 8, 1873	428	132	3	403
141, 247	Weldon, A., Chicago, Ill. Apparatus for hardening copper balls	July 29, 1873	854	278	4	113
137, 160	Weldon, F., Kilmorony, Ireland. Apparatus for compressing cotton, hay, &c.	Mar. 25, 1873	732	243	3	333
	Weldon, W. E. (<i>See</i> Perin, E. W., assignor.)					
	Welker, L. (<i>See</i> Steinhilper & Welker.)					
136, 013	Wellby, J., Frederickton, Canada. Railway dust-preventer	Feb. 18, 1873	577	190	3	199
141, 905	Weller, E. D., Lima, N. Y. Vehicle	Aug. 19, 1873	465	152	4	190
143, 650	Weller, M. E., Fort Plain, N. Y. Jig-saw	Oct. 14, 1873	230	77	4	408
	Welling, W. M. (<i>See</i> Colburn, G. F. J., assignor.)					
139, 695	Wellings, S. H., and S. Soules, assignors to selves and E. Y. Kelley, Bridgeville, Mich. Harvester-cutter	June 10, 1873	243	76	3	644
	Wellington, D., Boston, Mass. Cock for water-closets	Nov. 15, 1873			4	504
135, 501	Wellington, W., Rockford, Ill. Clothes-pin	Feb. 4, 1873	98	31	3	135
145, 605	Wellington, D., Virginia City, Nev. Break-beam for cars	Dec. 16, 1873	514	169	4	651
6, 555	Wellman, M. J., New York, N. Y. Lamp-chimney	Apr. 1, 1873			3	357
6, 556	Same. same	Apr. 1, 1873			3	357
134, 718	Same. Lamp-burner	Jan. 7, 1873	203	66	3	23
5, 376	Welpton, J. B., Tabor, Iowa. Hame-tug clip	Apr. 22, 1873	888	280	3	463
137, 519	Welpton, J. B., assignor to J. B. Welpton and J. M. Barbour, Tabor, Iowa. Buckle-attachment to harness-saddles	Apr. 1, 1873	220	67	3	375
137, 398	Wells, A. S., New Britain, Conn. Bed-bottom	Apr. 1, 1873	106	34	3	365
	Wells, A. W. & Co. (<i>See</i> Wilcox, W. R., assignor.)					
	Wells, D. H. (<i>See</i> Cooley, W. T., assignor.)					
	Wells, D. W. (<i>See</i> Wells, P. F., assignor.)					
145, 978	Wells, H., Woburn, assignor of one-half interest to D. Fobes, Cambridge, Mass. Needle-threading hook	Dec. 30, 1873	873	283	4	702
143, 549	Wells, J. A., Waterbury, Conn. Machine for heading rivets	Oct. 7, 1873	137	45	4	391
144, 298	Wells, J. M., Painesville, Ohio. Car-coupling	Nov. 4, 1873	105	35	4	487
	Wells, K. (<i>See</i> Spears and K. & R. Wells.)					
136, 347	Wells, M. M., Hartwick, N. Y. Fork and grain-rake	Feb. 25, 1873	883	284	3	234
139, 985	Wells, P. F., assignor to self and D. W. Wells, Milford, Mich. Cultivator	June 17, 1873	500	158	3	672
	Wells, R. (<i>See</i> Spears and K. & R. Wells.)					
	Wells, T. F. (<i>See</i> Ott, A., assignor.)					
137, 987	Wells, W., assignor of one-half interest to E. P. Fuller, Salem, Mass. Revolving horse-rake	Apr. 15, 1873	641	202	3	433
139, 445	Wells, W., Salem, Mass. Vapor-generator	May 27, 1873	900	290	3	601
144, 581	Wells, W., assignor of one-half interest to D. Buffum, Salem, Mass. Vapor-generator	Nov. 11, 1873	353	119	4	518
145, 466	Wells, W., Salem, Mass. Vapor-engine	Dec. 9, 1873	379	125	4	628
135, 954	Wells, W. T., and G. E. Morehouse, Decatur, Ill. Shovel and spade	Feb. 18, 1873	525	172	3	194
145, 261	Welsh, C. P., and R. J. Orr, Mahanoy City, Pa. Balanced valve	Dec. 2, 1873	200	69	4	601
135, 186	Welsh, J. D., Farmland, Ind. Grain-drill teeth	Jan. 21, 1873	627	205	3	86
	Welsh, J. H. (<i>See</i> Welsh, P. J. & J. H.)					
138, 826	Welsh, P. J. & J. H., Philadelphia, Pa. Attachable rocker for chairs	May 13, 1873	330	101	3	535
	Welter, J. K., <i>et al.</i> (<i>See</i> Forden, J. M., assignor.)					
	Same. (<i>See</i> Gross, E. L., assignor.)					
134, 829	Wempe, G., San Francisco, Cal. Needle-case	Jan. 14, 1873	313	100	3	45
137, 809	Wemple, A., Chicago, Ill. Thrashing-machine	Apr. 15, 1873	492	154	3	421
138, 457	Wendel, C., New York, N. Y. Lounge and bath-tub combined	Apr. 29, 1873	1,103	348	3	488
	Wendell, L. P. (<i>See</i> Conner, J., assignor.)					

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137, 520	Wendover, H., Norway, N. Y. Harrow.....	Apr. 1, 1873	221	68	3	375
138, 217	Wendt, L., Philadelphia, Pa. Pocket-book.....	Apr. 22, 1873	863	273	3	460
	Wensthoff, W. (See Kneisly & Wensthoff.)					
140, 228	Wentworth, F. W., assignor of one-half interest to G. W. Stackpole, Boston, Mass. Marking-brush.....	June 24, 1873	732	231	3	699
142, 066	Wentz, G., Cincinnati, Ohio. Game-board.....	Aug. 19, 1873	606	199	4	201
140, 661	Wenzel, H. J., San Francisco, Cal. Transmitting time-movement to distant dials.....	July 8, 1873	286	97	4	43
136, 885	Werden, C. A., Waukegan, Ill. Reel-rake for harvesters.....	Mar. 18, 1873	483	160	3	302
145, 704	Werner, C. E., Brookfield, Mo. Still for alcoholic spirits.....	Dec. 16, 1873	602	197	4	658
135, 023	Werner, H., Louisville, Ky. Self-acting dam.....	Jan. 21, 1873	496	159	3	75
139, 986	Werner, J., jr., Prairie du Sac, Wis. Harvester.....	June 17, 1873	501	159	3	672
142, 881	Same..... Reel for harvesters.....	Sept. 16, 1873	497	170	4	305
134, 621	Werner, R., Hoboken, N. J. Crimping and fluting machine.....	Jan. 7, 1873	112	37	3	16
140, 326	Same..... Crimping or fluting machine.....	June 24, 1873	821	261	3	707
141, 973	Werni, P., Newark, N. J. Air gas-machine.....	Aug. 19, 1873	517	171	4	194
139, 747	Wertheimer, L., New York, N. Y. Box for packing and preserving tobacco.....	June 10, 1873	292	90	3	648
140, 327	Westcott, B. S., assignor of one-half interest to L. Dodge, Corning, N. Y. Whiffletree.....	June 24, 1873	821	261	3	707
142, 825	Wessmann, M. F., Brooklyn, N. Y. Telegraph receiving-register.....	Sept. 16, 1873	453	153	4	301
142, 826	Same..... Telegraph transmitting-key.....	Sept. 16, 1873	454	153	4	301
	Wesson, D. B. (See Smith & Wesson.) (Reissue.)					
136, 348	Wesson, D. B., Springfield, Mass. Revolving fire-arm.....	Feb. 25, 1873	883	284	3	234
5, 561	Wesson, M., Springfield, Mass. Channeling soles of boots and shoes..... (Extension)	May 24, 1873			3	558
	Wesson, M., Springfield, Mass., assignor to G. McKay, trustee. Machine for channeling soles of boots and shoes..... (Reissue.)	Sept. 2, 1873	205	66	4	258
	West, C. (See Glesenkamp, L., assignor.)					
142, 972	West, C., Pittsburgh, Pa. Piles-supporter.....	Sept. 16, 1873	577	195	4	311
	West, D., et al. (See Sloan, D. S., assignor.)					
134, 778	West, E. P., Jersey City, N. J. Band-pulley.....	Jan. 14, 1873	265	86	3	41
138, 772	Same..... Binding-folder.....	May 13, 1873	283	88	3	530
	West, F. M. (See Thurston & West.)					
	West, H. B. (See Brown & West.)					
137, 744	West, I. M., Summit, assignor of one-half interest to H. A. Iddings, Crete, Nebr. Earth-auger.....	Apr. 8, 1873	428	132	3	403
134, 719	West, J., and O. M. Parker, said Parker assignor to said West, Quincy, Ill. Steam bell-ringer.....	Jan. 7, 1873	204	66	3	23
145, 376	West, J. B., and J. C. Fish, assignors of one-half interest to W. H. Kelsey, Geneseo, N. Y., and J. C. McKibbin, Washington, D. C. Machine for cutting and dressing stone.....	Dec. 9, 1873	301	101	4	622
	West, P. (See Lee, G. S., assignor.)					
135, 051	West, P., Worcester, Mass. Rivet for boots and shoes.....	Jan. 21, 1873	522	169	3	77
5, 670	West, P., and G. S. Lee, Worcester, Mass. Boot..... (Reissue.)	Nov. 25, 1873	763	257	4	575
142, 423	Same..... Cards for social games.....	Sept. 2, 1873	88	29	4	249
142, 424	Same..... Boot.....	Sept. 2, 1873	89	29	4	249
143, 047	Same..... Game apparatus.....	Sept. 23, 1873	647	221	4	327
143, 799	Same..... same.....	Oct. 21, 1873	388	129	4	430
	West, S. C. (See Bartlett, N., assignor.)					
	West, T. (See Watson, P. B., assignor.)					
142, 599	West, W. F., Haverstraw, N. Y. Seed drill and planter.....	Sept. 9, 1873	255	83, 84	4	274
139, 219	Westbrooks, J. W., and A. J. Clemmons, Aberdeen, Miss. Farm-gate.....	May 20, 1873	688	216	3	577
136, 349	Westcott, J. H., Oneida, N. Y. Chuck.....	Feb. 25, 1873	885	284	3	234
144, 811	Westcott, N., Nelson, assignor of one-half interest to D. Cross, Morrisville, N. Y. Draft-attachment for plows.....	Nov. 18, 1873	553	188	4	546
136, 948	Westerman, J., Sharon, Pa. Furnace for steam-boilers, &c.....	Mar. 18, 1873	537	177	3	306
	Western Union Telegraph Company. (See Stearns, J. B., assignor.) (Reissue.)					
	Westervelt, C. J. (See Wygant, Preston & Westervelt.)					
5, 504	Westinghouse, G., jr., Pittsburgh, Pa. Steam-power brake device..... (Reissue.)	July 29, 1873	1, 012	329	4	125
5, 505	Same..... Steam-power air-brake device..... (Reissue.)	July 29, 1873	1, 014	329	4	126
5, 506	Same..... Steam-power car-brake apparatus..... (Reissue.)	July 29, 1873	1, 016	329	4	126
136, 396	Same..... Steam-power brake-coupling.....	Mar. 4, 1873	39	14	3	248
136, 397	Same..... Hose-coupling.....	Mar. 4, 1873	40	14	3	249
136, 631	Same..... Steam-power brake-coupling.....	Mar. 11, 1873	262	88	3	275
138, 827	Same..... Valve device for steam and air brakes.....	May 13, 1873	330	102	3	535
138, 828	Same..... Rotary-valve for steam-engine.....	May 13, 1873	332	102	3	535
141, 685	Same..... Valve device for fluid-brakes.....	Aug. 12, 1873	257	83	4	164
142, 600	Same..... Railway car-brake.....	Sept. 9, 1873	256	84	4	274
144, 005	Same..... Locomotive air-brake.....	Oct. 28, 1873	589	195	4	456
144, 006	Same..... Steam and air brake.....	Oct. 28, 1873	590	196	4	457
144, 582	Same..... Slack-taking-up apparatus for steam and air brakes.....	Nov. 11, 1873	354	120	4	518
	Westlake, W., administrator. (See Schemioth, C.)					
138, 218	Westlake, W., Chicago, Ill. Slate-washer.....	Apr. 22, 1873	863	273	3	461
140, 393	Same..... Platform for stoves.....	July 1, 1873	48	16	4	12
142, 134	Same..... Lantern.....	Aug. 26, 1873	683	224	4	217
143, 530	Same..... Locomotive head-light.....	Oct. 7, 1873	138	46	4	391
	Westmoreland, E. (See Westmoreland, W. and E.)					
137, 042	Westmoreland, J. M., assignor of one-half interest to A. J. Thompson, Willis, Tex. Sawing-machine.....	Mar. 18, 1873	620	205	3	313
140, 603	Westmoreland, W. and E., Nottingham, England, assignors of one-half interest to J. Kent, New York, N. Y. Feeding mechanism for sewing-machines.....	July 8, 1873	241	81	4	39
	Weston, C. H. (See Dennis & Weston.)					
	Same..... (See Green, H. S., assignor.)					
134, 956	Weston, C. H., Lowell, Mass. Cloth-steaming machine.....	Jan. 14, 1873	421	135	3	54
141, 842	Weston, C. W., San Francisco, Cal. Fruit-box.....	Aug. 12, 1873	394	128	4	175
5, 281	Weston, E. R., Corinth, Me., assignor of one-half interest to T. McDonald. Burnisher for photographs, &c..... (Reissue.)	Feb. 11, 1873	454	147	3	175
145, 979	Weston, J., Duxbury, Mass. Cranberry-picker.....	Dec. 30, 1873	873	283	4	702
139, 841	Weston, J. H., Cincinnati, Ohio. Coupling tubular lightning-rods.....	June 10, 1873	374	116	3	655
	Weston, J. W. (See Tull & Weston.)					
144, 717	Weston, J. W., assignor to T. M. Jackson, Windsor, Ill. Road-scraper.....	Nov. 18, 1873	473	160	4	540
	Weston, T. A. (See Terhume, W. S., assignor.)					
134, 957	Weston, T. A., Ridgewood, N. J. Brake-clutch for hoisting-apparatus.....	Jan. 14, 1873	422	135	3	54
134, 958	Same..... Brake-clutch for hoisting-machines.....	Jan. 14, 1873	423	135	3	54
146, 115	Westover, G. C., assignor of one-third interest to J. A. McClelland, Vernon, Ind. Suction-tube for planing-machines, &c.....	Dec. 30, 1873	994	321	4	712
135, 052	Wetmore, J., Salem, Ohio. Nut-locking device.....	Jan. 21, 1873	523	169	3	77
137, 268	Wetmore, J. W., Erie, Pa. Rain-water cut-off.....	Mar. 25, 1873	835	274	3	341
142, 540	Same..... Air-cushion for doors.....	Sept. 2, 1873	195	63	4	257

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139, 097	Wetsel, D., Morris, Pa. Brake for coal-cars.....	May 20, 1873	574	180	3	567
	Wette, P. C. (See Rockwell, J. G., assignor.)					
145, 377	Wever, W. L., and A. W. Johnson, Plattsburgh, N. Y. Liquid measure.....	Dec. 9, 1873	303	102	4	622
144, 426	Weyand, P., and P. Hill, Morrisania, N. Y. Spring-seat for wagons and carts.....	Nov. 11, 1873	226	75	4	508
136, 292	Weyburn, A. W., Minneapolis, Minn. Coffee-roaster.....	Feb. 25, 1873	834	269	3	230
144, 645	Wharry, J. R., Moundsville, W. Va. Vegetable-cutter.....	Nov. 18, 1873	419	140	4	535
144, 171	Wharton, E. C., Philadelphia, Pa. Pump.....	Oct. 28, 1873	727	243	4	468
145, 921	Same.....	Dec. 23, 1873	800	262	4	686
145, 262	Wharton, J., Newark, N. J. Forming hat-bodies.....	Dec. 2, 1873	201	69	4	601
142, 425	Wharton, J. C., Nashville, Tenn. Lamp.....	Sept. 2, 1873	90	30	4	249
	Wharton, W., jr., Philadelphia, Pa. Dispensing with switches for railways..... (Ex- tension)	Dec. 13, 1873			4	614
135, 304	Same..... Turn-table.....	Jan. 28, 1873	755	244	3	108
144, 172	Whealen, C., Dayton, Ohio, assignor to self and C. L. Hawes. Paper-machine.....	Oct. 28, 1873	728	243	4	468
140, 662	Wheat, A., Canaan, N. H. Splint.....	July 8, 1873	287	97	4	43
135, 679	Wheat, G. W., Philipsburgh, Pa. Mop-head.....	Feb. 11, 1873	276	87	3	161
136, 798	Wheat, J. J., Wheeling, W. Va. Sewing-machine table.....	Mar. 11, 1873	399	132	3	286
145, 263	Wheatcroft, H. B., assignor to J. Austin & Co., New York, N. Y. Pipe-wrench.....	Dec. 2, 1873	202	69	4	601
	Wheatley, J. H., et al. (See Morrill, J. A., assignor.)					
136, 195	Wheeldon, W. A., assignor of one-half interest to D. Bean, Chicago, Ill. Curtain-fix- ture.....	Feb. 25, 1873	750	242	3	224
	Wheeler, A., trustee. (See Woodward, E., assignor.)					
	Wheeler & Wilson Manufacturing Company. (See House, J. A., assignor.)					
136, 572	Wheeler, C., jr., Auburn, N. Y. Wood pavement.....	Mar. 4, 1873	198	66	3	261
138, 773	Wheeler, C. E., Boston, Mass. Painting striped awnings.....	May 13, 1873	283	88	3	530
140, 102	Wheeler, C. H., Saint Louis, Mo. Table-leaf support.....	June 17, 1873	607	191	3	681
	Wheeler, E., Elmira, N. Y. Railway car-seat..... (Extension)	Sept. 20, 1873			4	295
144, 242	Wheeler, E. E., South Norwalk, Conn. Comb-holder.....	Nov. 4, 1873	65	20	4	483
134, 779	Wheeler, E. L., Scytheville, N. H. Scythe.....	Jan. 14, 1873	265	87	3	42
143, 048	Wheeler, E. F., Corinth, Miss. Fire-kindler.....	Sept. 23, 1873	648	222	4	327
143, 551	Same..... Automatic gate.....	Oct. 7, 1873	139	46	4	391
143, 651	Same..... Register and indicator.....	Oct. 14, 1873	231	78	4	408
144, 007	Same..... Railway switch.....	Oct. 28, 1873	593	196	4	457
141, 743	Wheeler, E. S., assignor to self and J. E. Wheeler, Westport, Conn. Button-fastening.....	Aug. 12, 1873	302	99	4	168
143, 800	Wheeler, E. T., Cannelton, Ind. Reciprocating-churn.....	Oct. 21, 1873	393	129	4	430
145, 540	Wheeler, H., Racine, Wis. Device for converting motion.....	Dec. 16, 1873	463	151	4	647
145, 705	Wheeler, H., Burlington, Vt. Cement for slate-roofing.....	Dec. 16, 1873	603	197	4	658
	Wheeler, H. F. (See Trask & Wheeler.)					
138, 546	Wheeler, H. F., Boston, Mass. Organ lever coupling for hydraulic motors.....	May 6, 1873	70	23	3	503
141, 843	Same..... Machinery for finishing the sole-edges of boots and shoes.....	Aug. 12, 1873	395	129	4	175
143, 552	Wheeler, H. F., and W. O. Wakefield, assignors to selves and G. Allen, Boston, Mass. Stop-mechanism for looms.....	Oct. 7, 1873	139	46	4	391
	Wheeler, H. W., executrix. (See Wheeler, L. H.)..... (Reissue.)					
145, 541	Wheeler, J. A., Chippewa Falls, Minn. Windmill.....	Dec. 16, 1873	464	152	4	647
	Wheeler, J. E. (See Kirchhofer, L. F., assignor.)					
	Same..... (See Wheeler, E. S., assignor.)					
6, 947	Wheeler, J. E., Westport, Conn. Buttons for wearing apparel..... (Design)	Oct. 7, 1873			4	380
142, 306	Wheeler, J. H., Saint Louis, Mo. Folding-table.....	Aug. 26, 1873	822	272	4	229
135, 187	Wheeler, J. J., Grinnell, Iowa. Car-starter.....	Jan. 21, 1873	628	205	3	86
	Wheeler, J. L. (See Halsted & Wheeler.)					
5, 531	Wheeler, L. H., deceased, by H. W. Wheeler, executrix, assignor of one-third interest to W. H. Wheeler, Beloit, Wis. Windmill..... (Reissue)	Aug. 12, 1873	399	130	4	175
139, 285	Wheeler, M. A., San Francisco, Cal. Paper-clip.....	May 27, 1873	765	242	3	590
136, 293	Wheeler, M. M., Galena, Ill., assignor of one-half interest to J. Jones, Dodgeville, Wis. Construction of boots and shoes.....	Feb. 25, 1873	834	270	3	230
144, 173	Same..... Gaiter.....	Oct. 28, 1873	729	243	4	468
5, 332	Wheeler, R. B., Dowagiac, Mich., assignor of one-half interest to H. Lardner. Basket. (Reissue)	Mar. 18, 1873	630	208	3	314
140, 802	Wheeler, R. W., Bushnell, Ill. Cylinder for lining wooden pumps.....	July 15, 1873	410	139	4	61
137, 581	Wheeler, S., Albany, N. Y. Sawing-machine.....	Apr. 8, 1873	282	87	3	391
145, 771	Same..... Ore-washer.....	Dec. 23, 1873	671	219	4	676
141, 023	Wheeler, S. H., Niles, Mich. Basket.....	July 22, 1873	630	212	4	88
	Wheeler, W. H. (See Wheeler, L. H., assignor.)..... (Reissue.)					
	Wheelock, A. (See Converse, G. C., assignor.)					
140, 328	Wheelock, J., Worcester, Mass. Nut for securing piston-heads to piston-rods.....	June 24, 1873	822	261	3	707
144, 174	Same..... Steam-engine valve-gear.....	Oct. 28, 1873	730	244	4	468
144, 583	Same..... Tool-holder and cutter-head for boring bars.....	Nov. 11, 1873	355	120	4	518
140, 663	Wheelock, W., assignor of one-half interest to W. T. Baker, Decorah, Iowa. Railway snow-plow.....	July 8, 1873	287	97	4	43
	Wheelwright, S., executor. (See Boyd, J. C.)..... (Extension.)					
144, 718	Whelpley, J. A., Dartmouth, Nova Scotia. Skate.....	Nov. 18, 1873	474	161	4	540
137, 269	Whinyates, J. W., Liverpool, England. Endless-chain propellers.....	Mar. 25, 1873	835	274	3	341
	Whipple, G. M., et al. (See Taylor, T. A., assignor.)					
143, 738	Whipple, H. E., Providence, R. I. Washer-cutter.....	Oct. 14, 1873	318	106	4	414
141, 408	Whipple, H. J. B., Meriden, Conn. Attaching knobs to spindles.....	July 29, 1873	1,001	327	4	125
137, 988	Whipple, I. B., Gloversville, N. Y. Gauntlet glove.....	Apr. 15, 1873	641	202	3	434
137, 642	Whipple, J. P., Whitewater, Wis. Car-coupling.....	Apr. 8, 1873	331	102	3	395
136, 632	Whipple, J. R., Boston, Mass. Cooler for wine.....	Mar. 11, 1873	264	89	3	275
137, 270	Whipple, M. K., Warren, Mass. Pulley.....	Mar. 25, 1873	837	275	3	341
	Whipple, R. M. (See Dickerson & Whipple)..... (Reissue.)					
	Same..... (See Dickerson, T. S., assignor.)..... (Reissue.)					
137, 521	Whipple, R. M., Chicago, Ill., and J. G. Blunt, Leavenworth, Kans. Manufacture of gas for illuminating, heating, &c.....	Apr. 1, 1873	221	68	3	375
134, 959	Whisenant, G. F., Chapel Hill, Tex. Compound for destroying caterpillars.....	Jan. 14, 1873	424		3	54
136, 115	Whitaker, E. V., Gloversville, N. Y. Glove.....	Feb. 18, 1873	665	217	3	205
	Whitaker, G. (See Jamieson, H. A., assignor.)					
145, 035	Whitaker, J., assignor to S. S. Cook, Woonsocket, R. I. Car-axle journal.....	Nov. 25, 1873	755	255	4	574
145, 264	Same..... Journal or shaft hanger.....	Dec. 2, 1873	203	70	4	601
145, 467	Same..... Journal and bearings.....	Dec. 9, 1873	380	126	4	628
146, 116	Whitaker, J., and S. S. Cook, said Whitaker assignor to said Cook, Woonsocket, R. I. Car-axle box.....	Dec. 30, 1873	995	321	4	712
142, 751	Whitaker, W. W., Gloversville, N. Y. Changeable gage car-truck.....	Sept. 9, 1873	383	128	4	284
142, 752	Same..... Car-axle box.....	Sept. 9, 1873	384	129	4	284
	Whitall, H. (See Burson, J., assignor.)					
141, 248	Whitcomb, I., Hingham, Mass. Method of blasting rock.....	July 29, 1873	854	279	4	113

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136, 116	Whitecomb, J. B., assignor of two-thirds interest to J. and A. Brittan, Beloit, Wis. Carriage-spring.....	Feb. 18, 1873	666	218	3	205
	Whitecomb, W. W. (See Brackett & Whitcomb)..... (Reissue.)					
138, 774	Whitecomb, W. W., Boston, Mass. Tent-frame.....	May 13, 1873	284	88	3	531
136, 799	White, A. M., Bridgeport, Conn., assignor to the Fairchild Water-Meter Company, New York, N. Y. Liquid meter.....	Mar. 11, 1873	400	133	3	287
138, 304	White, C. H., White's Station, Mich. Fire-escape ladder.....	Apr. 29, 1873	970	305	3	477
139, 220	Same..... Railway-switch.....	May 20, 1873	688	217	3	577
137, 522	White, D., Normal, Ill. Carpet-stretcher.....	Apr. 1, 1873	224	69	3	375
	White, D. P. (See Berthet & Laberie, assignors.)					
	White, E. B., deceased, by L. C. White, administrator, Nashua, N. H. Alarm attachment for tills..... (Extension)	July 5, 1873			4	7
	White, F. (See Silber & White.)					
138, 219	White, G. R., Boston, Mass. Nursing-bottle.....	Apr. 22, 1873	864	274	3	461
6, 623	White, G. W., New York, N. Y., assignor to P. and F. Corbin, New Britain, Conn. Door-knob..... (Design)	Apr. 29, 1873			3	471
6, 624	Same..... Plates of door-bolts..... (Design)	Apr. 29, 1873			3	471
140, 664	White, G. W., Brooklyn, N. Y. Music-leaf turner.....	July 8, 1873	288	97	4	43
140, 394	White, H., Chicago, Ill. Joiner's work-bench.....	July 1, 1873	49	17	4	12
142, 307	White, H., La Fayette, Ind. Boot-lining.....	Aug. 26, 1873	823	273	4	229
	White, H. F., et al. (See Beach & Hanson, assignors.)					
	White, H. G. (See Ryder, C., assignor.)					
141, 844	White, H. J., assignor to self and A. B. Hill, Boston, Mass. Cap and spoon for mustard-bottles.....	Aug. 12, 1873	396	129	4	175
139, 639	White, H. K., Chelsea, assignor to Parker, White & Co., Boston, Mass. Tipping-chair.....	June 3, 1873	171	56	3	623
142, 308	White, J., South Amboy, assignor to self and C. S. Worts, Jamesburgh, N. J. Spark-arrester.....	Aug. 26, 1873	824	273	4	229
144, 175	White, J., Philadelphia, Pa. Faucet.....	Oct. 28, 1873	733	244	4	468
	White, J. C. (See Tinnerholm, C. J., assignor)..... (Reissue.)					
5, 291	White, J. E., New York, N. Y., assignor to L. A. Corvet. Casting stench-traps..... (Reissue)	Feb. 18, 1873	686	221	3	206
	White, J. H. (See Clark & Chaney, assignors.)					
143, 208	White, J. J., Norfolk, Va. Coal-scuttle.....	Sept. 23, 1873	772	266	4	337
143, 862	White, J. J., Juliustown, N. J. Lightning-rod.....	Oct. 21, 1873	445	148	4	435
137, 582	White, J. M., and A. J. Kee, Hannibal, Mo. Folding-ladder.....	Apr. 8, 1873	283	87	3	391
136, 117	White, J. N., assignor of one-fourth interest to G. E. Sears, New Orleans, La. Rice-cleaning machine.....	Feb. 18, 1873	667	218	3	205
135, 053	White, J. S., Portland, Me. Brush.....	Jan. 21, 1873	524	169	3	77
145, 772	White, J. W., Weymouth, Mass. Guard for doors and windows.....	Dec. 23, 1873	672	219	4	676
145, 773	Same..... Window-guard.....	Dec. 23, 1873	673	219	4	676
143, 739	White, L., Waterbury, Conn. Chimney-furnace.....	Oct. 14, 1873	319	109	4	414
140, 749	White, L. B., assignor to self and S. R. White, Norfolk, Va. Plow.....	July 8, 1873	362	122	4	49
	White, L. C., administrator. (See White, E. B.)..... (Extension.)					
	White, L. S., Waterbury, Conn. Burnishing-machine..... (Extension)	Apr. 5, 1873			3	325
143, 481	White, M. B., McLean County, Ill. Wheel for vehicles.....	Oct. 7, 1873	68	24	4	386
5, 691	White, R., Lowell, Mass. Revolving fire-arm..... (Reissue)	Dec. 16, 1873	616	202	4	660
143, 394	Same..... same.....	Sept. 30, 1873	943	319	4	367
	White, S. R. (See White, L. B., assignor.)					
	White, S. S. (See Edwards, C. E., assignor.)					
	Same..... (See Rogers, J. G., assignor.)					
136, 573	White, T. H., and E. Knight, Cleveland, Ohio. Lamp.....	Mar. 4, 1873	199	66	3	261
138, 970	White, V., Corry, Pa. Washing-machine.....	May 13, 1873	448	141	3	544
140, 329	White, W. H. H., San Francisco, Cal. Medical compound for cure of consumption, &c.....	June 24, 1873	823		3	707
135, 054	Whitehead, H. B., Holly Springs, Miss. Universal joint-coupling.....	Jan. 21, 1873	524	169	3	77
139, 848	Same..... Implement.....	June 10, 1873	293	91	3	648
143, 801	Whitehead, J., Manchester, England. Dandy-roller for paper machines.....	Oct. 21, 1873	393	130	4	430
134, 960	Whitehead, J. W., Saco, Me. Brake for spinning-mules.....	Jan. 14, 1873	424	135	3	54
138, 458	Whitehill, J., Frederick, Md. Fertilizer.....	Apr. 29, 1873	1, 104		3	488
	Whitehead, M. (See Lovejoy, A. J., assignor.)					
	Whitin Machine Works. (See Taft, G. E., assignor.)					
137, 271	Whiting, A. F., Crestline, Ohio. Reversible knob-latch.....	Mar. 25, 1873	837	275	3	341
137, 272	Same..... same.....	Mar. 25, 1873	838	275	3	341
	Whiting, E. B. (See Willett, G., assignor)					
138, 459	Whiting, H. A., New York, N. Y. Machine for wiring and binding hats.....	Apr. 29, 1873	1, 105	348	3	488
143, 312	Whiting, J. E., Harford, Pa. Turbine water-wheel.....	Sept. 30, 1873	868	297	4	362
	Whiting, L. E. (See Bishop, G. W., assignor.)					
	Whiting Manufacturing Company. (See Marble & Glidden, assignors.)					
142, 601	Whiting, S. J., Philadelphia, Pa. Composition for pavements.....	Sept. 9, 1873	258		4	274
138, 829	Whiting, T., Niles, Mich. Measuring wheels for wagon-tires.....	May 13, 1873	333	102	3	535
140, 176	Whiting, T. H., Grand Haven, Mich. Fly-trap.....	June 24, 1873	692	217	3	696
141, 303	Whiting, W. M., Brooklyn, assignor to the Plummer Sewing-Machine Company, New York, N. Y. Sewing-machine.....	July 29, 1873	901	296	4	117
	Whitlock, A., et al. (See Knight, L., assignor.)					
134, 780	Whitlock, D., Newark, N. J. Mechanism for operating sewing-machines.....	Jan. 14, 1873	266	87	3	42
142, 602	Whitman, E. J., Oakland, Cal. Kettle and pan scraper.....	Sept. 9, 1873	258	84	4	274
	Whitman, F. H. (See Woodsum, E. H., assignor.)					
	Whitmon, J. M. (See Hawley, S. F., assignor.)					
	Whitmore, C. E. (See Hunter & Whitmore.)					
	Whitney, A., et al. (See Hubbell, N. C., assignor.)					
	Whitney, A. C. (See Hale & Whitney.)					
137, 745	Whitney, A. L., Fitchburgh, Mass. Button-hole cutter and punch.....	Apr. 8, 1873	429	132	3	403
	Whitney Arms Company. (See Whitney, E., jr., assignor.)					
137, 583	Whitney, B. D., Winchendon, Mass. Band-sewing machine.....	Apr. 8, 1873	283	87	3	391
137, 989	Whitney, E., jr., assignor to the Whitney Arms Company. Swivel-loop for fire-arms.....	Apr. 15, 1873	642	202	3	434
	Whitney, E. F., et al. (See Broadbooks, P., assignor.)					
139, 640	Whitney, E. R., Magog, Canada. Type.....	June 3, 1873	172	57	3	623
	Whitney, H. W. (See Whitney, J. and H. W.)					
137, 643	Whitney, J. and H. W., Boston, Mass. Musical-instrument.....	Apr. 8, 1873	332	102	3	395
6, 362	Whitney, J. B., New York, N. Y. Hinge..... (Design)	Jan. 21, 1873			3	71
6, 363	Same..... Door-knobs..... (Design)	Jan. 21, 1873			3	71
6, 364	Same..... same..... (Design)	Jan. 21, 1873			3	71
6, 365	Same..... Key-hole escutcheon..... (Design)	Jan. 21, 1873			3	71
6, 557	Same..... Bell-pull..... (Design)	Apr. 1, 1873			3	357
	Whitney, J. H. (See Livingstone, W., assignor.)					
134, 961	Whitney, J. H., Rochester, Minn. Sewing-machine.....	Jan. 14, 1873	424	136	3	54
	Whitney, M. L., et al. (See Scott & Hiltz, assignors.)					

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
134, 962	Whittemore, A., Cambridgeport, Mass. Coin-counting implement	Jan. 14, 1873	426	136	3	54
138, 061	Same..... Scissors.....	Apr. 22, 1873	729	231	3	450
140, 229	Same..... Car-starter.....	June 24, 1873	732	231	3	699
140, 803	Same..... Machine for cutting off pegs in boots and shoes.....	July 15, 1873	411	139	4	61
142, 135	Same..... Car-replacer.....	Aug. 26, 1873	683	225	4	217
143, 948	Same..... Car-starter.....	Oct. 21, 1873	513	173	4	440
145, 468	Same..... Same.....	Dec. 9, 1873	381	126	4	628
145, 469	Same..... Peg-cutter.....	Dec. 9, 1873	382	126	4	628
142, 309	Whittemore, C. B., Arlington, Mass. Bundling kindling-wood.....	Aug. 26, 1873	824	272	4	229
142, 753	Whittemore, D. (See Herron, A. C., assignor.) Whittemore, J. R., Chicopee Falls, Mass. Tobacco-ridger	Sept. 9, 1873	385	129	4	285
136, 633	Whitten, J. O., et al. (See Enos, J. A., assignor.) Whitten, S. M., Algansee, Mich. Combined carpet-rag looper, button-hole cutter, and press-board	Mar. 11, 1873	265	89	3	276
143, 482	Whittier, C., assignor to W. L. Bradley, Boston, Mass. Process of treating refuse matter.....	Oct. 7, 1873	69	24	4	386
141, 906	Whittier, R., assignor of one-half interest to R. Hackett, Oshkosh, Wis. Cant-hook.....	Aug. 19, 1873	467	152	4	190
142, 827	Whittlesey, J. E., and J. W. C. Peters, Chicago, Ill. Elastic-fabric mattress-frame.....	Sept. 16, 1873	455	154	4	301
138, 062	Whorf, C. F., Saint Louis, Mo. Railway car-heater and ventilator	Apr. 22, 1873	730	231	3	450
136, 574	Whritnoeur, E. (See Ball, C. A., assignor.) Wiard, E., assignor to B. F. Avery, Louisville, Ky. Cultivator.....	Mar. 4, 1873	200	66	3	261
142, 136	Same..... Plow.....	Aug. 26, 1873	684	225	4	217
142, 310	Same..... Plow-colter.....	Aug. 26, 1873	825	274	4	229
144, 584	Same..... Plow.....	Nov. 11, 1873	356	120	4	518
137, 334	Wickers, G. O., North Andover, Mass. Self-acting spinning-mule	Apr. 1, 1873	55	16	3	361
135, 188	Wickersham, J. B., Philadelphia, Pa. Iron fence.....	Jan. 21, 1873	629	205	3	86
136, 014	Wickersham, W., Boston, Mass. Nail for attaching soles to boots and shoes	Feb. 18, 1873	578	190	3	199
143, 483	Same..... Railway-signal.....	Oct. 7, 1873	70	24	4	386
141, 845	Wickes, S. W., assignor to H. C. Silsby, Seneca Falls, N. Y. Mode of lubricating pistons in rotary steam-engines.....	Aug. 12, 1873	397	129	4	175
138, 305	Wickham, C. L., Utica, N. Y. Lathe-dog.....	Apr. 29, 1873	972	305	3	477
135, 502	Wickham, H., jr., Chicago, Ill. Glass-mold.....	Feb. 4, 1873	99	31	3	135
143, 209	Wideman, F. M., Calverton, Md. Washing-machine.....	Sept. 23, 1873	773	266	4	338
5, 605	Widmann, J. G., Yonkers, N. Y. Stove..... (Extension).....	May 10, 1873	.....	.....	3	497
139, 641	Same..... same..... (Reissue).....	Oct. 14, 1873	330	109	4	415
6, 724	Same..... Drip-conductor.....	June 3, 1873	172	57	3	623
7, 076	Widmayer, L., assignor to P. and F. Corbin, New Britain, Conn. Drawer-pull. (Design).....	June 24, 1873	.....	.....	3	691
135, 024	Same..... Lock-case..... (Design).....	Dec. 23, 1873	.....	.....	4	671
145, 265	Widmer, J., Bristol, Conn. Hydro-steam-engine..... (Extension).....	Jan. 21, 1873	497	160	3	75
145, 542	Wiebe, E., Brooklyn, N. Y. Mode of advertising..... (Extension).....	Nov. 15, 1873	.....	.....	4	504
144, 719	Wiegand, C., Virginia City, Nev. Process of separating silver from other metals.....	Dec. 2, 1873	204	.....	4	601
145, 139	Wiegand, S. L. (See Moorhouse & Wiegand)..... (Reissue).....	Dec. 16, 1873	465	152	4	647
139, 937	Wielings, C. M., San Francisco, Cal. Paper-feeding machine..... (Reissue).....	Nov. 18, 1873	475	161	4	540
139, 937	Wienhold, J. (See Lee, E. F., assignor)..... (Reissue).....	Dec. 2, 1873	96	31	4	593
139, 937	Wiesebeck, F. W., New York, N. Y. Carbonic-acid-gas generator.....	June 17, 1873	466	146	3	669
139, 937	Same..... Fountain for soda-water, &c.....	.....	.....	.....	.....	.....
139, 937	Wieser, J., Williamsport, Pa. Shirt.....	.....	.....	.....	.....	.....
139, 937	Wieting, W. H., et al. (See Dayton, M. E., assignor.) Wiggin, J., jr. (See Bandon & Wiggin.) Wiggin, J. E., assignor to H. H. Mawhinney, Stoneham, Mass. Cutting attachments for sewing-machines.....	June 3, 1873	69	23, 24	3	614
145, 470	Wiggin, J. G., Moultonville, N. H. Car-brake.....	Dec. 9, 1873	383	127	4	628
145, 922	Wiggin, W. H. (See Cozzens & Wiggin.) Wight, D. R., Southbridge, Mass. Carriage-jack.....	Dec. 23, 1873	801	262	4	686
135, 025	Wight, G. H. (See Wight, W. H., assignor.) Wight, W. H., Princess Anne County, Va., assignor to self and G. H. Wight, Lowell, Mass. Soldering-tool.....	Jan. 21, 1873	498	160	3	75
140, 859	Wightman, D. A., East Greenwich, assignor to S. Scholfield, Providence, R. I. Roll for cigar-machines.....	July 15, 1873	458	156	4	65
140, 860	Same..... Machine for making cigar-bunches.....	July 15, 1873	459	156	4	65
134, 576	Same..... same.....	July 15, 1873	461	156	4	65
136, 476	Wightman, J. B., Brooklyn, N. Y. Child's carriage.....	Jan. 7, 1873	71	22	3	12
138, 547	Wightman, J. C., Boston, Mass. Lasting boots and shoes.....	Mar. 4, 1873	107	36	3	254
141, 249	Wightman, J. C., Newton, and J. H. Mills, Boston, Mass., said Wightman assignor by mesne assignment to said Mills. Apparatus for automatic control of combustion in hot water and hot air heating-apparatus.....	May 6, 1873	71	24	3	503
145, 140	Wightman, J. C., Newton, assignor by mesne assignment to C. Houghton, Boston, Mass. Steam and vacuum water-elevator.....	July 29, 1873	855	279	4	113
142, 541	Wightman, J. C., Newton, Mass. Filling for beds, mattresses, &c.....	Dec. 2, 1873	96	.....	4	533
140, 979	Wigton, H. W. (See Legg, C., assignor.) Wikidal, W. A., et al. (See Gibbs, L., assignor)..... (Reissue).....	Sept. 2, 1873	196	63	4	257
144, 176	Wilbaux, A., Paris, France. Apparatus for printing on solid or inflexible surfaces.....	July 15, 1873	576	194	4	74
138, 830	Wilber, F. A., Wabash, Ind. School-desk.....	Oct. 28, 1873	733	{ 244 245 }	4	468
142, 828	Wilber, I. L., Taunton, Mass. Loom-shedding mechanism.....	May 13, 1873	333	{ 102 103 }	3	535
137, 273	Wilber, J. D., Poughkeepsie, N. Y. Harvester.....	Sept. 16, 1873	455	{ 154 155 }	4	311
144, 720	Same..... same.....	.....	.....	.....	.....	.....
135, 955	Wilber, W. H. (See Smith, S. H., assignor.) Wilbraham, J., et al. (See Wilbraham, J. W., assignor.) Wilbraham, J. W., assignor to self, T. and J. Wilbraham, Philadelphia, Pa. Reciprocating steam-engine.....	Mar. 25, 1873	839	275	3	341
139, 696	Wilbraham, T., et al. (See Wilbraham, J. W., assignor.) Wilbur, A., Cedar City, Mo. Ice-house.....	Nov. 18, 1873	476	161	4	540
140, 750	Wilbur, J., Chesterton, Ind. Washing-machine.....	Feb. 18, 1873	526	172	3	194
137, 274	Wilbur, W. R., Cleveland, Ohio. Nut and washer machine.....	June 10, 1873	244	77	3	644
144, 375	Wilcox, A. W., New Haven, Conn. Reed-board for organs.....	July 8, 1873	363	123	4	49
143, 652	Wilcox, D., Derby, Conn. Manufacture of fifth wheels for carriages, &c.....	Mar. 25, 1873	839	276	3	342
7, 067	Wilcox, D., Birmingham, Conn. Die for forging offsets or stay-ends for carriages.....	Nov. 4, 1873	169	56, 57	4	492
141, 409	Wilcox, G., Norwich, Conn. Feed-gage for printing presses.....	Oct. 14, 1873	232	78	4	408
142, 311	Wilcox, H. C., assignor to The Meriden Britannia Company, West Meriden, Conn. Handle for table casters..... (Design).....	Dec. 16, 1873	.....	.....	4	641
141, 846	Wilcox, H. E., Ilion, N. Y. Work-box.....	July 29, 1873	1, 007	327	4	125
141, 846	Wilcox, H. S., Nevada, Ohio. Flue casing for forge-chimneys.....	Aug. 26, 1873	826	274	4	229
141, 846	Wilcox, J., Canton, Pa. Car-coupling.....	Aug. 12, 1873	397	130	4	175

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145, 036	Wilcox, J. H. (<i>See</i> Elam, W. P., assignor.)					
138, 110	Wilcox, M., and C. Depledge, Cassadaga, N. Y. Chair-rocker	Nov. 25, 1873	756	255	4	574
138, 971	Wilcox, N. O., Omaha, Neb. Washing-compound	Apr. 22, 1873	768	244	3	453
	Same.....Bed-bottom	May 13, 1873	448	141	3	545
134, 577	Wilcox, S. (<i>See</i> Babcock & Wilcox.)					
144, 376	Wilcox, W., Middletown, Conn. Manufacture of keys for locks	Jan. 7, 1873	72	22	3	12
139, 098	Wilcox, W. R., assignor to self and A. W. Wells & Co., Saint Joseph, Mich. Fruit basket	Nov. 4, 1873	170	57	4	492
5, 626	Wilcoxon, J., Russellville, Ill. Mechanism for operating screw-propellers	May 20, 1873	575	180	3	567
141, 410	Wilde, H., Newark, N. J., assignor to E. and B. Holmes, Buffalo, N. Y. Machine for crozing and chamfering staves	Oct. 21, 1873	536	177	4	442
136, 886	Wildenthaler, F. J., Philadelphia, Pa. Apparatus for emptying sinks and cess-pools	July 29, 1873	1,008	327	4	125
135, 680	Wilder, A. A., Detroit, Mich., assignor of one-half interest to A. Rankin, Windsor, Ontario. Dummy or traction engine	Mar. 18, 1873	485	161	3	302
137, 275	Wilder, E. F., Lowell, Mass. Apparatus for filling oil-can	Feb. 12, 1873	277	87	3	161
136, 887	Wilder, E. F., West Roxbury, assignor to J. W. Tufts, Medford, Mass. Chest-protector	Mar. 25, 1873	840	276	3	342
142, 426	Wilder, R. A., Cressona, Pa. Machine for breaking coal and other substances	Mar. 18, 1873	486	161	3	303
144, 721	Same.....Coal-breaker	Sept. 2, 1873	91	30	4	250
138, 972	Wilders, J. M., Croxton Keyrial, England, assignor of one-half interest to W. Silverwood, Baltimore, Md. Thrashing-machine	Nov. 18, 1873	476	161	4	540
137, 117	Wilen, G. C., Philadelphia, Pa. Row-lock	May 13, 1873	449	141	3	545
144, 812	Wiley, C. J., New York, N. Y. Printing-telegraph	Mar. 25, 1873	697	231	3	331
139, 221	Same.....Unison stop for printing telegraphs	Nov. 18, 1873	553	188	4	546
	Wiley, E., assignor of two-thirds interest to C. D. Alexander and E. R. Winship, Philadelphia, Pa. Car-coupling	May 20, 1873	690	217	3	577
	Wiley, J. A., <i>et al.</i> (<i>See</i> Davis, H. D., assignor.)					
	Same.....(<i>See</i> McGovern, P., assignor.)					
	Same.....(<i>See</i> Stone, J. M., assignor.)					
143, 395	Wiley, S. D., <i>et al.</i> (<i>See</i> Grant, J. J., assignor.)					
135, 739	Wilford, J. B., assignor to H. Bradford, Reading, Pa. Coal-separator	Sept. 30, 1873	945	319	4	367
145, 706	Wilhelm, A. C. (<i>See</i> Wilhelm, C. and A. C.)					
145, 378	Wilhelm, A. C., Philadelphia, Pa. Button for garments	Feb. 11, 1873	325	104	3	165
146, 117	Wilhelm, C. and A. C., Philadelphia, Pa. Lamp-shade	May 3, 1873			3	470
	Wilhelm, J. C., Shaver's Creek, Pa. Game-apparatus	Dec. 16, 1873	603	197	4	658
	Wilkins, J. A., Indianapolis, Ind. Combined drawing-table and desk	Dec. 9, 1873	303	102	4	622
	Wilkerson, S., jr., Bassingbourn, England. Apparatus for raising, emptying, and filling sacks	Dec. 30, 1873	995	321	4	712
	Wilkins, J. L. (<i>See</i> Fewkes, J. T., assignor.)					
140, 103	Wilkins, P. P. (<i>See</i> Loggins & Wilkins.)					
140, 104	Wilkins, S. B., and A. Marcellus, Rockford, Ill. Bolt-machine	June 17, 1873	608	19, 20	3	681
145, 707	Wilkinson, A. W., New York, N. Y. Manufacturing illuminating-gas	June 17, 1873	609		3	681
6, 969	Same.....Carbureter	June 17, 1873	610	192	3	681
	Same.....Distilling petroleum	Dec. 16, 1873	605		4	658
137, 746	Wilkinson, G., assignor to Gorham Manufacturing Company, Providence, R. I. Spoons and forks	Oct. 28, 1873			4	452
	Wilkinson, G., A. L. Possoz, J. P. Lafargue, and A. E. Dutreih, Paris, France. Process and apparatus for extracting the juice of sugar-cane, &c	Apr. 8, 1873	430	133	3	403
142, 362	Wilkinson, J. B. (<i>See</i> Hermance, R. M., assignor.)					
136, 398	Wilkinson, J. M., Bloomington, Tenn. Animal-trap	Sept. 2, 1873	36	13	4	245
6, 384	Wilkinson, N. J., Kalamazoo, Mich. Car-starter	Mar. 4, 1873	41	14, 15	3	249
	Wilkinson, W. H. (<i>See</i> Moore & Wilkinson.)					
	Wilkinson, W. H., assignor to North American Iron Works, New York, N. Y. Vase	Feb. 4, 1873			3	127
137, 644	Willard, C., Bartonville, Vt. Saw-sharpening device	Apr. 8, 1873	332	103	3	395
137, 523	Willard, G., New York, N. Y. Apparatus for making ice	Apr. 1, 1873	224	69	3	375
136, 196	Willard, H., Grand Rapids, Mich. Barrel	Feb. 25, 1873	751	242	3	224
140, 862	Same.....Barrel-hoop	July 15, 1873	463	156	4	65
134, 782	Willard, Z. A., Boston, Mass. Furnace for roasting and treating ores	Jan. 14, 1873	267	87, 88	3	42
139, 222	Willeby, S. P., Philadelphia, Pa. Combination of center and bilge keels for vessels	May 20, 1873	691	217	3	577
136, 477	Willerton, W., Jacksonville, Ill. Cultivator	Mar. 4, 1873	107	36	3	254
142, 427	Willett, G., Burlington, assignor to E. B. Whiting, Saint Albans, Vt. Apparatus for combing and mixing tampico and bristles	Sept. 2, 1873	92	30	4	250
139, 488	Willgoos, H., New York, N. Y. Step-ladder chair	June 3, 1873	41	13	3	612
140, 565	Williams, N. W., assignor to W. C. Baker, Philadelphia, Pa. Drop-light for chandeliers	July 1, 1873	192	64	4	24
134, 781	Williams, A., Burrell, Pa. Nut-lock	Jan. 14, 1873	267	87	3	42
137, 118	Williams, A. J., Seneca Falls, N. Y. Carpet-fastener	Mar. 25, 1873	700	232	3	331
144, 813	Williams, A. M., assignor of one-half interest to C. H. Duncan, Oil City, Pa. Sucker-rod joint for pumps	Nov. 18, 1873	554	188	4	546
	Williams, B. (<i>See</i> Turneure, R., assignor.)					
137, 161	Williams, B. A., Berea, Ohio. Washing-machine	Mar. 25, 1873	734	244	3	334
5, 527	Williams, B. J., Philadelphia, Pa. Window screen and shutter	Aug. 5, 1873	195	61	4	151
5, 528	Same.....Blind-slat operator	Aug. 5, 1873	195	61	4	151
135, 869	Williams, C. D., Saint Paul, Minn. Boiler-furnace	Feb. 11, 1873	440	143	3	173
140, 980	Williams, C. H., Cleveland, Ohio. Die for making car-coupling pins	July 15, 1873	577	194	4	74
140, 981	Same.....Die for manufacturing car-coupling pins	July 15, 1873	578	195	4	74
143, 484	Williams, C. H., Syracuse, N. Y. Dish-washing machine	Oct. 7, 1873	73	25	4	386
145, 322	Williams Continuous-Spinner Company. (<i>See</i> Williams, C. S. M. and H. M., assignors.)					
	Williams, C. S. M. and H. M., assignors to The Williams Continuous-Spinner Company, Coldwater, Mich. Spinning-machine	Dec. 9, 1873	261	87, 88	4	619
23, 635	Williams, C. W., Port Jervis, N. Y. Gate for canal-locks	Apr. 12, 1873			3	386
144, 177	Same.....same	Apr. 11, 1873			3	386
	Williams, C. W., New York, N. Y. Cap for scissors-points	Oct. 28, 1873	734	245	4	468
	Williams, D., <i>et al.</i> (<i>See</i> Pitrat, M. J., assignor.)					
	Williams, D. F. (<i>See</i> Brown & Williams.)					
140, 982	Williams, D. G., York, Pa. Balance-wheel for sewing-machines	July 15, 1873	581	196	4	75
138, 460	Williams, E. R., <i>et al.</i> (<i>See</i> Burt, J., assignor.)					
	Williams, F. B., Sterling, Ill. Boring-attachment to lathes	Apr. 29, 1873	1,105	349	3	488
144, 937	Williams, F. J. (<i>See</i> Truxell & Williams.)					
142, 829	Williams, G. C., Catskill, N. Y. Heater and feeder for boilers	Nov. 25, 1873	667	226	4	566
141, 411	Williams, G. R., Ithaca, N. Y. Clock-calendar movement	Sept. 16, 1873	457	155	4	301
143, 109	Williams, H., Apple River, Ill. Wheels for vehicles	July 29, 1873	1,009	328	4	125
	Williams, H. A., Mansfield, Mass. Bracelet	Sept. 23, 1873	695	238	4	331

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No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
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138, 973	Williams, H. B., assignor to self, A. G. Corre, L. L. Benson, and J. B. Schroder, Cincinnati, Ohio. Stock for drill or other bits	May 13, 1873	449	141	3	545
	Williams, H. M. (See Williams, C. S. M., and H. M.)					
138, 974	Williams, H. W., Grinnell, Iowa. Wash-boiler attachment	May 13, 1873	451	142	3	545
138, 775	Williams, J., Philadelphia, Pa., assignor to E. and C. Chambers, jr. Process in casting in metallic molds	May 13, 1873	286	.....	3	531
139, 446	Williams, J., Hemmingford, Canada. Carrier for excavators	May 27, 1873	901	290	3	601
140, 330	Williams, J., Topeka, Kans. Combined baker's oven and range	June 24, 1873	824	262	3	707
143, 949	Williams, J., South Haven, Mich. Fruit-dryer	Oct. 21, 1873	514	173	4	440
	Williams, J. D. (See Du Chateau & Williams.)					
	Williams, J. H. (See Wales, S. E., assignor.)					
	Williams, J. Q. (See Harrison, R. J., assignor.)					
	Williams, J. T. (See Williams, M. A. and J. T.)					
136, 575	Williams, J. T., Philadelphia, Pa. Can for oil and paint	Mar. 4, 1873	200	67	3	261
136, 888	Williams, L., and W. S. McKinnie, Stonelick Township, Ohio. Single-tree	Mar. 18, 1873	487	161	3	303
	Williams, L. P., et al. (See Morrill, J. A., assignor.)					
142, 312	Williams, L. U., La Fayette, Ind. Half-boot	Aug. 26, 1873	827	274	4	229
140, 983	Williams, M. A. and J. T., Chicago, Ill. Needle-threader for sewing-machines	July 15, 1873	582	196	4	75
142, 882	Williams, P. and R. A., Winona, Miss. Cotton-press	Sept. 16, 1873	498	170	4	305
	Williams, R., jr., et al. (See Langham, T., assignor.)					
	Same..... (See Wink, F., assignor.)..... (Design.)					
145, 708	Williams, R., Philadelphia, Pa. Harness-trace	Dec. 16, 1873	605	197	4	658
	Williams, R. A. (See Williams, P. and R. A.)					
142, 184	Williams, R. J., Ottumwa, Iowa. Grain-drier	Aug. 26, 1873	722	239	4	220
	Williams, R. N., et al. (See Cooper, S. L., assignor.)					
135, 026	Williams, R. S., Norristown, Pa. Earth-closet	Jan. 21, 1873	498	{ 160 161 }	3	75
137, 747	Williams, R. S., New York, N. Y. Preparing gold for dentists	Apr. 8, 1873	432	133	3	403
140, 984	Same..... Manufacture of dental gold	July 15, 1873	582	196	4	75
	Williams, S. M. (See Williams, C. S. M., and H. M.)					
136, 350	Williams, T., Providence, R. I. Pipe-wrench	Feb. 25, 1873	885	285	3	234
136, 351	Same..... Self-adjusting pipe-wrench	Feb. 25, 1873	886	285	3	234
138, 548	Same..... Combination-tool	May 6, 1873	73	24	3	503
144, 299	Williams, T. G., assignor to W. Warner & Co., Akron, Ohio. Eaves-trough hanger	Nov. 4, 1873	106	35	4	487
144, 499	Williams, W., New Berlin, Ill. Land-roller	Nov. 11, 1873	275	93	4	512
144, 938	Williams, W. H., Brooklyn, assignor to J. R. Graham, New York, N. Y. Machine for cutting veneers	Nov. 25, 1873	668	227	4	567
139, 938	Williams, W. R., Indiana Township, Pa. Vault-cover	June 17, 1873	466	146	3	669
136, 800	Williamson, C. H., and J. H. Allyn, Whitestown, N. Y. Machine for molding panels	Mar. 11, 1873	401	133	3	287
137, 043	Williamson, D., Greenville, N. J. Revolving fire-arm	Mar. 18, 1873	621	205	3	313
144, 814	Same..... Revolving fire-arm	Nov. 18, 1873	555	188	4	546
144, 815	Same..... same	Nov. 18, 1873	556	189	4	546
141, 024	Willis, F. H., Boston, Mass. Shawl-strap	July 22, 1873	631	212	4	88
	Willis, J. W. (See Pierce, D., assignor.)					
140, 395	Willis, S. M., Athol, Mass. Mallet	July 1, 1873	49	17	4	12
145, 037	Willmann, A., Mount Carmel, Ill. Potato-digger	Nov. 25, 1873	756	255	4	574
135, 611	Willoughby, J. D., Washington, D. C. Stove-damper	Feb. 4, 1873	209	65	3	143
5, 249	Wills, H. A., Vergennes, Vt., assignor to J. A. Wills and L. S. Kingsland. Machine for finishing horseshoe-nails	Jan. 21, 1873	645	209	3	87
137, 990	Wills, J., Rock Island, Ill. Single-tree for horse-cars	Apr. 15, 1873	643	203	3	434
	Wills, J. A. (See Wills, H. A., assignor.)..... (Reissue)					
139, 842	Willson, W. N. C., Summit Point, W. Va. Driving-rein support and protector	June 10, 1873	374	116	3	655
135, 870	Wilmington, W., Toledo, Ohio. Car-wheel	Feb. 11, 1873	441	144	3	173
136, 399	Wilmot, S., Detroit, Mich. Clamp for cigar-molds	Mar. 4, 1873	42	15	3	249
137, 991	Wilmot, S. R., Bridgeport, Conn. Sheet-metal tubing	Apr. 15, 1873	643	203	3	434
137, 992	Same..... Manufacture of sheet-metal tubing	Apr. 15, 1873	644	203	3	434
	Wilson, A., deceased, by J. H. Wilson, administratrix, New Britain, Conn. Mode of lighting gas by electricity	Aug. 16, 1873	.....	.....	4	159
136, 197	Wilson, A., Birmingham, England, assignor to J. Conaway and J. Locken, Philadelphia, Pa. Apparatus for tempering umbrella-ribs, steel-strips, &c	Feb. 25, 1873	751	242	3	224
140, 665	Wilson, A., Plainfield, N. J. Driven-well	July 8, 1873	289	98	4	43
143, 210	Wilson, A., Birmingham, England, assignor to J. Conaway and J. Locken, Philadelphia, Pa. Machine for affixing middle-bits to umbrella-ribs	Sept. 23, 1873	774	267	4	338
142, 313	Wilson, A. M., assignor of one-half interest to W. R. Gillett, White Pigeon, Mich. Wash-ing-machine	Aug. 26, 1873	827	274	4	229
141, 191	Wilson, B. F., Salem, Ohio. Connecting-rod	July 22, 1873	787	258	4	100
135, 189	Wilson, C. F., Northbridge, Mass., assignor to self and J. E. Folk, Brooklyn, N. Y. Spindle-step for spinning-machines	Jan. 21, 1873	630	205	3	86
135, 190	Same..... Spindle-bolster for spinning-machines	Jan. 21, 1873	630	206	3	86
138, 721	Wilson, C. F., Northbridge, Mass., and S. H. Miller, assignors to selves and J. E. Folk, Brooklyn, N. Y. Die for cutting and cupping sheet-metal	May 6, 1873	229	71	3	516
143, 211	Wilson, C. G., Milledgeville, Ga. Cotton-seed planter and guano-distributor	Sept. 23, 1873	774	267	4	338
136, 478	Wilson, C. O., Columbia, Ohio. Pump-nozzle	Mar. 4, 1873	108	36	3	254
	Wilson, F. C. (See Evenden, J. G., assignor.)					
141, 615	Wilson, F. C., assignor to self and J. G. Evenden, Chicago, Ill. Cans for oils	Aug. 5, 1873	179	57	4	150
	Wilson, G. (See Baisley & Wilson.)					
141, 097	Wilson, G., and G. H. Baisley, said Baisley assignor to I. V. Splawn, Hamilton, Mo. Earth-boring machine	July 22, 1873	695	233	4	93
	Wilson, Glass & Co. (See Glass, J., assignor.)					
	Wilson, G. W. (See Martin & Wilson.)					
135, 740	Wilson, G. W., Chebanse, Ill. Millstone-balance	Feb. 11, 1873	326	104	3	165
	Wilson, H., et al. (See Kirkup, L., assignor.)					
	Wilson, I. A. (See Wilson, L. B., assignor.)					
	Wilson, J., et al. (See Scott, E. E., assignor.)					
145, 471	Wilson, J., Dover, N. J. Furnace for reducing iron ores	Dec. 9, 1873	384	127	4	628
	Wilson, J., C. Green, and W. Wilson, jr., New Castle County, Del. Double-seaming machine	Apr. 19, 1873	.....	.....	3	416
	Same..... Machine for corrugating sheet-metal..... (Extension)	Apr. 19, 1873	.....	.....	3	416
143, 213	Wilson, J., C. Green, and W. Wilson, jr., Wilmington, Del. Powder-keg..... (Extension)	July 12, 1873	.....	.....	4	35
	Wilson, J. B., Townsend's Inlet, N. J., assignor to self and W. A. Barrett, Philadelphia, Pa. Fertilizing soil	Sept. 23, 1873	777	.....	4	338
	Wilson, J. C. (See Crippen, H. M., assignor.)					
136, 400	Wilson, J. C., Buffalo, N. Y. Duplex-telegraph	Mar. 4, 1873	42	15	3	249
	Wilson, J. F. (See Dowling, R. H., assignor.)					
	Wilson, J. H., administratrix. (See Wilson, A.)..... (Extension)					

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137, 584	Wilson, J. K., Brimfield, Ill. Trestle-platform for unloading wagons.....	Apr. 8, 1873	284	88	3	301
	Wilson, J. M. (See Pettit, H., assignor.)					
142, 363	Wilson, J. M., Philadelphia, Pa. Air-heating furnace	Sept. 2, 1873	37	13	4	245
138, 722	Wilson, J. P., Yonkers, N. Y., assignor to A. Carr, Paterson, N. J. Steam-radiator	May 6, 1873	230	71	3	516
143, 212	Wilson, J. P., New York, N. Y. Attachment for ladies' work-tables.....	Sept. 23, 1873	776	267	4	338
	Wilson, J. W., et al. (See Neil, J. W., assignor.)					
139, 843	Wilson, J. W., assignor of one-half interest to J. W. Vose, Pawtucket, R. I. Middlings-purifier	June 10, 1873	375	116	3	655
	Wilson, K. H. (See Groff & Wilson.)					
135, 871	Wilson, L. B., Caldwell, assignor to I. A. Wilson, Zanesville, Ohio. Car-coupling	Feb. 11, 1873	442	144	3	174
140, 331	Wilson, M. E., and A. J. Perry, said Perry assignor to said Wilson, Galesburgh, Ill. Fluting and plaiting machine	June 24, 1873	825	262	3	707
136, 015	Wilson, M. M., Honey Grove, Tex. Screw-propeller	Feb. 18, 1873	579	191	3	199
	Wilson, N. E. (See Marion & Wilson.)					
	Wilson, T. (See Scott & Wilson.)					
139, 223	Wilson, T., and L. B. Kendall, Kalamazoo, Mich. Hose-coupling	May 20, 1873	691	217	3	577
	Wilson, W. (See Bowden & Shaw, assignors.)					
	Wilson, W., jr. (See Green & Wilson.)					
	Same..... (See Wilson, Green & Wilson)					
135, 392	Wilson, W., Madison, Ind. Sewing-machine table-top	Jan. 28, 1873	837	270	3	115
138, 063	Wilson, W., and J. Foster, Chariton, Iowa. Shoemakers' finishing-tools	Apr. 22, 1873	731	231	3	450
	Wilson, W. G. (See Carey, D. C., assignor)					
	Wilson, W. H., Easton, Md. Mode of changing the speed in machinery	July 8, 1873	363	123	4	49
140, 751	Wimpenny, A. B., Hayfield, Great Britain. Smoothing-iron	Mar. 4, 1873	44	16	3	249
136, 401	Winall, A. W. (See Gault & Winall.)					
135, 393	Winall, A. W., Cincinnati, Ohio. Device for adjusting millstones.....	Jan. 28, 1873	837	270	3	115
137, 748	Same..... same	Apr. 8, 1873	433	133	3	403
139, 642	Same..... Hanging millstones	June 3, 1873	173	57	3	623
143, 602	Winans, T., Baltimore, Md. Pneumatic action for organs	Oct. 14, 1873	187	63, 64	4	404
144, 243	Winans, T. and W. L., Baltimore, Md. Construction of steam-vessels.....	Nov. 4, 1873	66	21	4	483
	Winans, W. L. (See Winans, T. and W. L.)					
144, 244	Winchell, J. B., and H. W. Rugg, Benton Harbor, Mich. Sand-band for vehicle-axes	Nov. 4, 1873	67	21	4	483
136, 118	Winchell, J. F., assignor to E. C. Middleton, Springfield, Ohio. Fare-box	Feb. 18, 1873	667	218	3	205
140, 985	Winchell, J. F., Springfield, Ohio, assignor by mesne assignment to J. B. Slawson, New York, N. Y. Fare-box	July 15, 1873	583	197	4	75
	Winchester, F. M. (See Danforth & Winchester.)					
138, 461	Winchester, G. C., Ashburnham, Mass. Tilting-chair	Apr. 29, 1873	1, 106	349	3	488
	Winchester Repeating-Arms Company. (See Smith & Wesson, assignors) ... (Reissue.)					
136, 294	Windle, G., assignor of one-half interest to N. N. Davis, New Cambria, Mo. Hand-planter.....	Feb. 25, 1873	835	270	3	230
134, 578	Windship, G. B., Boston, Mass. Apparatus for physical culture	Jan. 7, 1873	72	23	3	12
138, 598	Winecoff, J., Lavansville, Pa. Wagon-seat.....	May 6, 1873	114	37	3	507
	Winfield, H. (See Bell & Winfield.)					
142, 314	Wing, A. T., assignor to G. F. Dillingham, Old Town, Me. Lathe for turning spools	Aug. 26, 1873	828	275	4	229
143, 863	Wing, J., Boston, assignor to New England Glass Company, East Cambridge, Mass. Process of forming orifices and necks on glass articles	Oct. 21, 1873	446	148	4	435
143, 864	Same..... Mold for glass-lamp fountains	Oct. 21, 1873	446	149	4	435
134, 963	Wingate, E. B., Friendship, N. Y. Nut and bolt fastening.....	Jan. 14, 1873	427	136	3	54
144, 585	Wingate, G., Boston, Mass. Draught-apparatus for metallurgic and other furnaces.....	Nov. 11, 1873	357	120	4	518
144, 586	Same..... Chimney-top.....	Nov. 11, 1873	358	121	4	519
144, 939	Same..... Baking-mold.....	Nov. 25, 1873	669	227	4	567
135, 612	Wingate, J. D., Carbondale, Pa. Depurator for the teeth and gums	Feb. 4, 1873	211	65	3	143
145, 038	Wingo, B. W., assignor of one-half interest to J. H. Davis, Chillicothe, Mo. Cultivator..	Nov. 25, 1873	757	256	4	574
6, 387	Wink, F., assignor to T. Dolan and R. Williams, jr., Philadelphia, Pa. Shawl.. (Design) ..	Feb. 11, 1873			3	156
6, 388	Same..... same..... (Design) ..	Feb. 11, 1873			3	156
6, 389	Same..... same..... (Design) ..	Feb. 11, 1873			3	156
6, 390	Same..... same..... (Design) ..	Feb. 11, 1873			3	156
6, 391	Same..... same..... (Design) ..	Feb. 11, 1873			3	156
6, 392	Same..... same..... (Design) ..	Feb. 11, 1873			3	156
6, 393	Same..... same..... (Design) ..	Feb. 11, 1873			3	156
6, 394	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 395	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 396	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 397	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 398	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 399	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 400	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 401	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 402	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 403	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 404	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 405	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 406	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 407	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 408	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 409	Same..... same..... (Design) ..	Feb. 11, 1873			3	157
6, 835	Same..... Shawl-pattern..... (Design) ..	Sept. 2, 1873			4	241
6, 836	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 837	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 838	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 839	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 840	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 841	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 842	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 843	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 844	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 845	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 846	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 847	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 848	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 849	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 850	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 851	Same..... same..... (Design) ..	Sept. 2, 1873			4	241
6, 852	Same..... same..... (Design) ..	Sept. 2, 1873			4	241

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6, 853	Wink, F., assignor to T. Dolan and R. Williams, jr., Philadelphia, Pa. Shawl-pattern. (Design)	Sept. 2, 1873			4	241
6, 854	Same.....Shawl-pattern.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 855	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 856	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 857	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 858	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 859	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 860	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 861	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 862	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 863	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
6, 864	Same.....same.....(Design).....	Sept. 2, 1873	.....	.....	4	241
143, 553	Winn, S. A. (See Winn, S. M. and S. A.) Winn, S. M. and S. A., San Francisco, Cal. Sofa-bedstead.....	Oct. 7, 1873	141	47	4	392
144, 245	Winningham, H. (See Davidson & Winningham.) Winship, E. R., et al. (See Wiley, E., assignor.) Winship, G., Atlanta, Ga., assignor to self and R. Winship. Baling-press.....	Nov. 4, 1873	68	21	4	483
137, 749	Winship, R. (See Winship, G., assignor.) Winship, T. J., Montreal, Canada. Apparatus for molding cigars	Apr. 8, 1873	434	134	3	403
136, 119	Winslow, A. P., Cleveland, Ohio. Roof for railway-cars.....(Extension).....	Aug. 9, 1873	.....	.....	4	135
5, 282	Winslow, C., Boston, Mass. Elastic material for boot and shoe gores.....	Feb. 18, 1873	669	219	3	205
	Winsor, I. C. (See Dorwart, B. K., assignor.) Winsor, J. S., Providence, assignor by mesne assignment to L. A. Cook, Woonsocket, and J. Kendrick, Providence, R. I. Machine for making weaver's harness.....(Reissue).....	Feb. 11, 1873	455	148	3	175
140, 863	Winston, A. G., et al. (See Conner, W. M., assignor.) Winston, A. V., et al. (See Conner, W. M., assignor.) Winter, J. A. (See Leyer & Winter.)					
140, 566	Winter, J. F., Brooklyn, N. Y. Paper-file.....	July 15, 1873	463	157	4	65
139, 347	Winter, H. R., Cedar Falls, Iowa. Mop, wringer, and scrubber combined	July 1, 1873	192	65	4	24
142, 067	Winter, W. W. (See Lusby & Winter.) Winterbaner, L., New York, N. Y. Liquid-sealed valve	May 27, 1873	810	259	3	594
145, 076	Winterberg, C. C. (See Mooney, Van Dorn, and Winterberg.) Wireman, F. C., New York, N. Y. Lamp-extinguisher.....	Aug. 19, 1873	607	200	4	201
142, 315	Wirick, V., Chicago, Ill. Car-starter.....	Dec. 2, 1873	34	11	4	588
145, 077	Wirth, A., assignor to self and C. Kolb, New York, N. Y. Hinge	Aug. 26, 1873	829	275	4	229
143, 049	Wirtz, H. C., and C. Gebhardt, jr., Northfield, Minn. Reciprocating-winnower	Dec. 2, 1873	35	11	4	588
142, 830	Wise, J., assignor to the Davis Sewing-Machine Company., Watertown, N. Y. Gather- ing and ruffling attachment for sewing-machines	Sept. 23, 1873	648	222	4	327
137, 810	Wise, S. G., Edgerton, Ohio. Thill-coupling	Sept. 16, 1873	458	155	4	301
140, 752	Wishart, T., assignor of one-half interest to S. G. Garman, Clayton, Del. Connecting- post for electrical apparatus.....	Apr. 15, 1873	493	154	3	421
144, 008	Wiswell, R. A. (See Wiswell, T. L., assignor.) Wiswell, T. L., assignor to R. A. Wiswell, Olathe, Kans. Portable-fence	July 8, 1873	364	123	4	49
137, 119	Wiswell, W. M., Portland, Me. Car-coupling	Oct. 28, 1873	594	197	4	457
142, 831	Withers, W. R., Newark, N. J. Toy.....	Mar. 25, 1873	700	232	3	331
136, 889	Withey, J. B., Chicago, Ill. Wheel for vehicles.....	Sept. 16, 1873	458	155	4	301
142, 068	Withington, G. (See Taylor & Withington.) Withington, G., Ione City, and F. F. Taylor, San Francisco, Cal. Car-coupling.....	Mar. 18, 1873	487	162	3	303
138, 549	Withington, J., Blossburgh, Pa. Furnace-grate.....	Aug. 19, 1873	608	200	4	201
140, 753	Witmer, B. R. (See Brubacker & Witmer.) Witovec, F. J., assignor to self and J. G. Butler, Saint Louis, Mo. Tobacco-press.....	May 6, 1873	73	24	3	504
	Witsil, G. L., Beverly, N. J., assignor of one-half interest to T. L. Bates, Philadelphia, Pa. Washing-machine	July 8, 1873	365	123	4	49
135, 872	Witteck, C. (See Beiderhase & Witteck.) Witter, B., Sherrill's Mount, Iowa. Cultivator.....	Feb. 11, 1873	443	144	3	174
140, 754	Witter, G., Sherrill's Mount, Iowa. Tenoning and boring machine	July 8, 1873	366	124	4	49
144, 879	Witzenmann, H. (See Levavasseur, E. I., assignor.) Witzigman, E., Buffalo, N. Y. Seeding-machine	Nov. 25, 1873	624	212	4	562
144, 178	Wock, J. (See Leaver & Wock.) Woerd, C. V., Waltham, Mass. Watchmaker's lathe.....	Oct. 28, 1873	735	245	4	468
142, 317	Woiceski, W., Bloomington, Ill. Punching-machine	Aug. 26, 1873	831	276	4	229
140, 177	Wolcott, G. T., assignor to self and H. P. Graves, Detroit, Mich. Bill and paper file	June 24, 1873	693	217	3	696
141, 616	Wolf, A. N., Allentown, Pa. Water-wheel.....	Aug. 5, 1873	180	57	4	150
139, 844	Wolf, C., Rochester, N. Y. Bedstead-fastening	June 10, 1873	375	117	3	655
142, 973	Same.....same.....	Sept. 16, 1873	578	195	4	312
145, 266	Same.....same.....	Dec. 2, 1873	205	70	4	601
138, 831	Wolf, D., et al. (See Liebrich, C., assignor.).....(Reissue)..... Wolf, L. M. N., Avon, Conn. Stamp-bracket for sewing-machines	May 13, 1873	336	103	3	535
5, 442	Wolf, M. W. (See Dewey, H. S., assignor.) Wolfe, D. J. (See Mills & Wolfe.) Wolfe, G. G., Troy, N. Y. Reservoir cooking-stove	June 10, 1873	380	118	3	655
142, 974	Wolff, A. D. B., Paris, France. Transposing key-board	Sept. 16, 1873	579	196	4	312
145, 472	Wolff, O. P., assignor to Strobridge & Co., Cincinnati, Ohio. Process of transferring lithographic prints on to glass, &c.....	Dec. 9, 1873	386	.....	4	628
145, 606	Same.....Lithographic transferred print.....	Dec. 16, 1873	515	.....	4	651
142, 185	Wolf, W., New York, N. Y. Steam-bathing apparatus	Aug. 26, 1873	723	239	4	220
145, 039	Wolfram, A. G., Apex, N. C. Caisson.....	Nov. 25, 1873	757	256	4	574
141, 250	Wolfinger, F. R., Chicago, Ill. Sewing-machine table.....	July 29, 1873	857	279	4	113
138, 723	Wolford, J., and R. Conner, Knightsville, Ind. Superheater for steam-boilers	May 6, 1873	230	72	3	516
141, 514	Same.....Pump.....	Aug. 5, 1873	92	28	4	142
136, 801	Wolston, P. N. (See Hotchkiss & Wolston.) Wollensack, J. F., Chicago, Ill. Transom-lifter and lock	Mar. 11, 1873	403	133	3	287
145, 040	Same.....Curtain-fixture.....	Nov. 25, 1873	759	256	4	574
138, 776	Wolohan, J. (See Jaquith & Wolohan.) Wolters, C., and I. Rudigier, Pittsburgh, Pennsylvania. Apparatus for improving liquors	May 13, 1873	286	88	3	531
142, 316	Wood, A., jr., Conshohocken, Pa. Rolling-mill.....	Aug. 26, 1873	830	275	4	229
140, 986	Wood, A. L., trustee. (See Chicken, W., assignor.) Wood, A. W., assignor to J. B. Slawson, Saint Louis, Mo. Change-gate.....	July 15, 1873	585	197	4	75
144, 816	Wood, B. L., Taunton, Mass. Belt-hole scupper.....	Nov. 18, 1873	557	189	4	546
143, 485	Wood, C., et al. (See Jackson, L. G., assignor.) Wood, C., Middlesborough-on-Tees, England. Apparatus for granulating slag-iron, &c.....	Oct. 7, 1873	74	25	4	386
144, 009	Same.....Manufacture of iron and steel from granulated iron	Oct. 28, 1873	595	.....	4	457
142, 542	Wood, C. A., Kentland, Ind. Weather-guard for doors	Sept. 2, 1873	157	64	4	258

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
144, 377	Wood, C. J. (See Henry & Wood.)					
	Wood, C. L., Calais, Me. Snow-plow for railways.....	Nov. 4, 1873	171	57	4	492
	Wood, D. (See Robinson & Wood)..... (Reissue.)					
138, 777	Wood, D., Hoboken, N. J. Rock-drilling machine.....	May 13, 1873	287	89	3	531
	Wood, E. (See Wood, J. & E.)					
136, 890	Wood, E. M., Needham, Mass. Metallic can, for meats, paints, &c.....	Mar. 18, 1873	488	162	3	303
145, 824	Wood, E. O., Nashua, N. H. Till-alarm.....	Dec. 23, 1873	711	234	4	679
6, 377	Wood, H. A., Bangor, Me. Cooking-stove..... (Design.)	Jan. 28, 1873			3	100
	Wood, J. (See Hanford & Wood.)					
	Wood, J., et al. (See Powell, A. H., assignor.)					
138, 724	Wood, J., New York, N. Y. Vault-light.....	May 6, 1873	231	72	3	516
5, 473	Wood, J., Red Bank, N. J., assignor of one-half interest to E. R. Bennett. Railway-frog. (Reissue).....	July 1, 1873	201	67	4	24
139, 643	Wood, J., Red Bank, N. J. Railway-crossing.....	June 3, 1873	174	57	3	623
140, 332	Same..... Railway-frog.....	June 24, 1873	825	262	3	707
140, 604	Wood, J., New York, N. Y. Can-opener.....	July 8, 1873	242	82	4	39
144, 880	Wood, J., Red Bank, N. J. Means for operating railway-switches.....	Nov. 25, 1873	625	212	4	562
145, 041	Same..... Railway-frog.....	Nov. 25, 1873	760	257	4	574
	Wood, J. E. (See Vanderpool, F., assignor.)					
145, 141	Wood, J. E., Huntington, W. Va. Fire-place grate.....	Dec. 2, 1873	97	32	4	513
144, 587	Wood, J. F., Wilmington, Del. False bottom for water-coolers.....	Nov. 11, 1873	358	121	4	519
138, 778	Wood, J. S., Brooklyn, N. Y., assignor of one-half interest to J. J. Carberry, Philadelphia, Pa. Gas-generator.....	May 13, 1873	289	89	3	531
140, 449	Wood, J. W., Conshohocken, Pa. Hinge.....	July 1, 1873	88	31	4	15
140, 864	Wood, L. S., Marion, Iowa. Floor.....	July 15, 1873	464	157	4	65
144, 490	Wood, M. R., Chicago, Ill. Car-coupling.....	Nov. 11, 1873	276	93	4	512
	Wood, O. (See Collins & Morrison, assignors.)					
	Wood, R. (See Harwood & Wood)..... (Design.)					
	Wood, R. O. (See McCall & Wood.)					
141, 528	Wood, S. B., and W. S., R. Y. H., and A. W. Terry, Hamburg, Ark. Flooring-clamp.....	Aug. 5, 1873	102	32	4	143
	Wood, S. D. (See Nelson, D. A., assignor.)					
136, 352	Wood, S. W., Cornwall, N. Y. Machine for patching bullets.....	Feb. 25, 1873	886	{ 285 286 }	{ 3 3 }	{ 234 234 }
138, 306	Same..... Folding-guide for sewing-machines.....	Apr. 29, 1873	972	{ 305 306 }	{ 3 3 }	{ 477 477 }
144, 010	Same..... Forming metallic cases for cartridges, caps, &c.....	Oct. 28, 1873	595	197	4	457
144, 011	Same..... Cartridge for fire-arm.....	Oct. 28, 1873	596	197	4	457
144, 012	Same..... Metallic cartridge-case.....	Oct. 28, 1873	597	197	4	457
	Wood, T. (See Atkinson & Klein, assignors.)					
	Same..... (See Atkinson, W., assignor.)					
139, 348	Wood, T. H., assignor to J. B. Brewster & Co., New York, N. Y. Carriage-spring.....	May 27, 1873	811	259	3	594
	Wood, W. A. (See Locke, S. D., assignor.)					
136, 295	Wood, W. A., Hoosick Falls, New York, N. Y. Harvester.....	Feb. 25, 1873	836	270	3	230
5, 474	Wood, W. D., McKeesport, Pa. Manufacture of sheet-iron..... (Reissue).....	July 1, 1873	202		4	25
137, 585	Same..... Manufacturing sheet-iron.....	Apr. 8, 1873	284		3	391
140, 865	Wood, W. D., assignor to self and J. Clarridge, Mount Sterling, Ohio. Treadle of sewing-machines.....	July 15, 1873	464	157	4	65
142, 754	Wood, W. D., McKeesport, Pa. Hammer for planishing sheet-iron.....	Sept. 9, 1873	385	129	4	285
	Wood, W. J. (See Chapman, L., assignor.)					
	Wood, W. W. W. (See Brear, A., assignor.)					
140, 333	Woodbridge, W. E., Little Falls, N. Y. Process of separating vegetable fiber.....	June 24, 1873	826	263	3	708
139, 697	Woodburn, J., Saint Louis, Mo., assignor to Woodburn-Sarven Wheel Company, Indianapolis, Ind. Wheel for vehicles.....	June 10, 1873	244	77	3	644
	Woodburn-Sarven Wheel Company. (See Woodburn, J., assignor.)					
145, 473	Woodbury, D., Rochester, N. Y. Horse-power.....	Dec. 9, 1873	387	128	4	628
	Woodbury, J. A. (See Thayer, H. H., assignor)..... (Reissue.)					
138, 462	Woodbury, J. P., Boston, Mass. Planing-machine.....	Apr. 29, 1873	1,107	{ 349 350 }	{ 3 3 }	{ 488 488 }
137, 993	Woodcock, J. M., Bridgeport, Ohio. Fire-place grate.....	Apr. 15, 1873	646	204	3	434
143, 313	Woodfine, J. J., Hoboken, N. J. Life-preserving mattress.....	Sept. 30, 1873	869	297	4	362
	Woodhouse, J. (See Barnes, J., assignor.)					
139, 489	Woodhouse, J. V., assignor to self, R. B. Lockwood, and W. A. Scott, Mine La Motte, Mo. Blast-furnace.....	June 3, 1873	42	13	3	612
	Woodley, J. (See St. Amant, O., assignor.)					
	Woodman, A. (See Brown, C. B., assignor.)					
136, 687	Woodman, H., Boston, Mass. Hose port-hole for partition walls.....	Mar. 11, 1873	307	102	3	279
145, 543	Woodmansee, L. D., Hamilton, Ohio. Leather-perforating machinery for harness-makers.....	Dec. 16, 1873	466	152	4	647
136, 576	Woodruff, C. D., Toledo, Ohio. Tea-kettle.....	Mar. 4, 1873	201	67	3	261
	Woodruff, T. T., Philadelphia, Pa. Seat and couch for railway-cars..... (Extension).....	May 31, 1873			3	585
	Woods, E. P., et al. (See Dudley, G. D., assignor.)					
	Woods, E. S. (See Hunter & Woods.)					
	Woods, E. P., et al. (See Sherwood, D., assignor.)					
5, 269	Woods, E. P., and D. Sherwood, Lowell, Mass., assignors to selves and C. H. Latham. Egg stand and boiler.....	Feb. 4, 1873	218	68	3	144
	Same..... same..... (Reissue).....	Feb. 4, 1873	219	68	3	144
5, 483	Same..... same..... (Reissue).....	July 8, 1873	370	125	4	50
134, 830	Woods, G., Cambridgeport, Mass. Reed-organ.....	Jan. 14, 1873	314	100	3	45
138, 725	Same..... Sounding-board bridge for musical instruments.....	May 6, 1873	232	72	3	516
145, 078	Same..... Reed-organ.....	Dec. 2, 1873	36	11, 12	4	588
144, 940	Woods, J. and E., Warrington, Great Britain. Machine for drawing wire.....	Nov. 25, 1873	670	227	4	567
144, 941	Woods, L. H., Syracuse, N. Y. Rotary-engine.....	Nov. 25, 1873	671	227	4	567
	Woods, S. A. (See Gray, W. H., assignor.)					
144, 588	Woods, S. A., Boston, Mass. Planing-machine.....	Nov. 11, 1873	359	121	4	519
	Woods, W. H. (See Randall, G. H., assignor.)					
137, 645	Woodside, R. H., Coulterville, Ill. Bee-hive.....	Apr. 8, 1873	333	103	3	395
134, 579	Woodside, G. W., assignor of half-interest to S. L. King, Philadelphia, Pa. Chromatic printing-press.....	Jan. 7, 1873	74	23	3	13
134, 720	Woodson, F. A., Selma, Ala. Steam-boiler.....	Jan. 7, 1873	205	66	3	23
144, 427	Woodsum, E. H., South Boston, Mass., assignor to F. H. Whitman, Harrison, Me. Block-fitting machine.....	Nov. 11, 1873	226	76	4	508
140, 230	Woodville, J., Washington, Ind. Railway-frog.....	June 24, 1873	734	232	3	700
135, 681	Woodward, E., assignor to A. Wheeler, trustee, Charlestown, Mass. Pegging-machine for boots and shoes.....	Feb. 11, 1873	278	88	3	161
	Woodward, J. O. (See Elliott & Woodward.)					
145, 079	Woodward, L., Nottingham, England, assignor to G. Fox. Knitting-machine.....	Dec. 2, 1873	38	12	4	588

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138, 355	Woodward, S. W., Buffalo, N. Y. Coal-screen.....	Apr. 29, 1873	1, 012	318	3	481
145, 923	Woodworth, A., Cambridge Village, N. Y. Metal-drilling machine	Dec. 23, 1873	801	{ 262 263 }	4	686
139, 987	Woodworth, J. R. (See Brace, W. H., assignor.) Woodworth, P. N., Stony Point, Cal. Harrow..... Woodworth, R. N. (See Short, J., assignor.) Wooldredge, J., et al. (See Rogers, I. R., assignor.)	June 17, 1873	502	159	3	672
139, 845	Wooldridge, D. H., Humboldt, Tenn. Cotton-press	June 10, 1873	376	117	3	655
135, 956	Woolever, L. B., Mechanicsville, Ohio. Staff-gage for dressing millstones	Feb. 18, 1873	526	172	3	195
136, 891	Woolf, A. E., New York, N. Y. Made feathers	Mar. 18, 1873	490	162	3	303
135, 741	Woolford, T. T., Romney, W. Va. Harvester.....	Feb. 11, 1873	326	105	3	165
139, 749	Woolner, A., Louisville, Ky. Apparatus for treating grain for distillation	June 10, 1873	294	91	3	648
135, 191	Woolridge, J., Dean's Corners, Ill. Land-roller.....	Jan. 21, 1873	631	206	3	86
141, 192	Woolson, A., Springfield, Vt. Tray for cloth-finishing machines	July 22, 1873	787	258	4	100
142, 543	Woolworth, C. M., Ottumwa, Iowa. Ruffler for sewing-machines	Sept. 2, 1873	198	64	4	258
	Woonsocket Machine Company. (See Chapman, G. A., assignor.) Wooster, G. C., et al. (See Rider, A. K., assignor.) Wooster, G. H. (See Walker, W., assignor.)					
5, 489	Wooster, W. L., Harvard, Ill. Automatic gate..... (Reissue) ..	July 15, 1873	592	199	4	76
136, 892	Same..... same..... (Reissue) ..	Mar. 18, 1873	491	162	3	303
5, 567	Wooten, J. E., Reading, Pa. Rivet..... (Reissue) ..	Sept. 9, 1873	392	131	4	285
138, 550	Wootton, H. and J., Rochester, N. Y. Culinary steamer	May 6, 1873	75	24	3	504
	Wootton, J. (See Wootton, H. and J.)					
135, 613	Worcester, E. J., Worcester, Mass. Drilling-machine.....	Feb. 4, 1873	211	66	3	143
138, 975	Same..... Bush-hammer.....	May 13, 1873	451	142	3	545
	Worcester, L., Brattleborough, Vt. Machine for boring or mortising blind-stiles. (Ex- tension).....	July 5, 1873			4	7
5, 568	Worcester, L., Lebanon, N. H. Machine for boring and mortising blind-stiles.. (Reissue) ..	Sept. 9, 1873	393	{ 131 132 }	4	285
141, 304	Worden, A., Ypsilanti, Mich. Oiler for steam-engines.....	July 29, 1873	902	296	4	117
140, 605	Work, H. C., Brooklyn, N. Y. Doll.....	July 8, 1873	242	82	4	39
144, 722	Worrall, P., Sugartown, Pa. Rotary engine.....	Nov. 18, 1873	477	162	4	540
145, 709	Worrell, E., and B. C. Moore, Philadelphia, Pa. Device for suspending and exhibiting placards, &c.....	Dec. 16, 1873	606	198	4	658
137, 044	Worrell, J., Belleville, Ind. Wheel-plow.....	Mar. 18, 1873	622	205	3	314
134, 622	Worrell, M. E., Monmouth, Ill. Pavement.....	Jan. 7, 1873	113	37	3	16
135, 957	Worrell, T. B., Philadelphia, Pa. Permutation-lock	Feb. 18, 1873	527	{ 173 174 }	3	195
	Worsham, A. S. (See Lester, J. S., assignor.)					
137, 871	Worsley, W., Little Falls, N. J. Convertible freight-car	Apr. 15, 1873	542	169	3	425
140, 178	Worstell, F. W., Saint Louis, Mo. Potato-planter	June 24, 1873	693	218	3	696
138, 551	Worster, G. H., Athol, Mass. Door-check and retainer	May 6, 1873	76	25	3	504
144, 043	Worster, R., assignor of one-half interest to N. N. Knight, Central Falls, R. I. Stove- damper.....	Oct. 28, 1873	620	205	4	459
136, 577	Worswick, J. R., and E. Lewis, Cleveland, Ohio. Swing-joint for pipes.....	Mar. 4, 1873	202	67	3	261
144, 378	Same..... Steam-boiler.....	Nov. 4, 1873	171	57, 58	4	492
	Worth, H. S. (See Johnson, W. A. and F. V., and Worth.)					
145, 379	Worth, W. E., San Francisco, Cal. Machine for printing oil-cloth	Dec. 9, 1873	304	102	4	622
	Wortham, J. (See Young & Wortham.)					
	Worthen, W. E., and H. B. Renwick, New York, N. Y. Corrugating sheet-metal. (Ex- tension).....	July 5, 1873			4	7
145, 267	Wotherspoon, J., and W. Foulis, Glasgow, North Britain. Gas-retort.....	Dec. 2, 1873	206	70	4	601
	Worthington, H. R., Irvington, N. Y. Pumping-engine..... (Extension) ..	July 19, 1873			4	57
142, 975	Worthley, N. T., Brunswick, Me. Clock-calendar	Sept. 16, 1873	580	196	4	312
	Worts, C. S. (See White, J., assignor.)					
	Wotkyns, T. S. (See Roberts, E. W., assignor.)					
135, 503	Wrealsh, A., assignor of two-thirds interest to E. Gwyn and W. Burns, Springfield, Ohio. Turbine water-wheel	Feb. 4, 1873	100	31, 32	3	135
138, 307	Wren, T., Hamilton, Nev. Ore-washer	Apr. 29, 1873	974	306	3	478
137, 750	Wren, W. C., Brooklyn, N. Y. Manufacturing illuminating-gas.....	Apr. 8, 1873	435	134	3	403
137, 811	Same..... Gas-retort furnace.....	Apr. 15, 1873	493	154	3	421
140, 606	Same..... Metallurgic gas-furnace.....	July 8, 1873	243	82	4	39
138, 599	Wright, A., and A. F. Tew, Westfield, N. Y. Crow and tamping-bars	May 6, 1873	115	38	3	507
135, 027	Wright, A. D., and A. Roys, Belleville, Mich., assignors to A. D. Wright. Barn-door fastening.....	Jan. 21, 1873	499	161	3	75
142, 318	Wright, A. T., Oskaloosa, Iowa. Bee-hive.....	Aug. 26, 1873	831	276	4	229
	Wright, C. A. (See Wright, D. B., assignor.)					
	Wright, C. W. (See Randol & Wright.)					
145, 142	Wright, D. B., assignor to C. A. Wright, Amesbury, Mass. Hub-boring machine	Dec. 2, 1873	97	32	4	593
144, 723	Wright, D. H., Terre Haute, Ind. Process of retouching photographic negatives.....	Nov. 18, 1873	478	162	4	540
138, 726	Wright, E., Philadelphia, Pa. Walking-cane umbrella	May 6, 1873	232	72	3	516
142, 544	Wright, E., Chicago, Ill. Mode of operating sewing-machines.....	Sept. 2, 1873	198	64	4	258
138, 976	Wright, G., Savannah, Mo. Sieve.....	May 13, 1873	452	142	3	545
145, 924	Wright, G., Saint Joseph, Mo. Sieve.....	Dec. 23, 1873	802	263	4	686
140, 106	Wright, G., M. Y. Holley, and H. R. Miles, Washington, D. C., assignors by mesne assign- ment to Gamewell & Co., New York, N. Y. Fire-alarm signal-box.....	June 17, 1873	611	192	3	681
	Wright, G. F. (See Sawyer & Wright.)					
139, 698	Wright, H., assignor of two-thirds interest to H. H. and B. F. Collins, Pittsburgh, Pa. Molasses-pitcher	June 10, 1873	245	77	3	644
141, 974	Wright, H. P., Bonaparte, Iowa. Steam-generator	Aug. 19, 1873	517	171	4	194
141, 529	Wright, H. W., assignor to A. Chapman, Glastenbury, Conn. Alloys	Aug. 5, 1873	103		4	143
141, 530	Same..... Alloy of nickel, zinc, and copper.....	Aug. 5, 1873	104		4	143
145, 825	Wright, J., New York, N. Y. Adjustable hanger for mirrors	Dec. 23, 1873	713	234	4	679
146, 118	Wright, J. B., Jersey City, N. J. Scroll-saw	Dec. 30, 1873	998	322	4	712
140, 987	Wright, J. C., and J. W. Sursa, Moline, Ill. Flat-iron heater	July 15, 1873	586	197	4	75
138, 920	Wright, J. F., and B. B. Jones, Columbus, Ind. Wheel for vehicles.....	Apr. 22, 1873	865	274	3	461
135, 458	Wright, J. S., and I. Benedict, Palmyra, N. Y. Potato-digger.....	Feb. 4, 1873	62	20	3	132
137, 994	Wright, J. S. R., Nichols, N. Y. Bolt for doors, &c.....	Apr. 15, 1873	647	204	3	434
136, 949	Wright, J. W., assignor to W. H. I. Howe, New York, N. Y. Air-tight tin can	Mar. 18, 1873	538	178	3	307
	Wright, L. (See Miller & Wright.)					
139, 099	Wright, L. P., Chicago, Ill. Road-scraper	May 20, 1873	576	181	3	568
5, 532	Wright, L. R., Schenectady, N. Y. Cultivator and plow combined..... (Reissue) ..	Aug. 12, 1873	401	130	4	175
142, 603	Wright, L. S., Groton, N. Y. Last-block fastener.....	Sept. 9, 1873	258	85	4	275
142, 604	Same..... Sash-balance.....	Sept. 9, 1873	259	85	4	275
136, 996	Wright, N., New York, N. Y. Sink-trap	Feb. 25, 1873	838	271	3	231

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139, 477	Wright, P. J., and J. Thompson, Holyoke, Mass. Stop motions for drawing-frames.....	May 27, 1873	902	291	3	601
141, 478	Wright, R., and J. H. Race, Brooklyn, N. Y. Chimney or globe holders.....	Aug. 5, 1873	61	19	4	140
138, 977	Wright, S., Hillsborough, Mo. Step-ladder.....	May 13, 1873	452	142	3	545
145, 710	Wright, S. J., Ellsworth, N. Y. Wrench.....	Dec. 16, 1873	607	198	4	658
138, 463	Wright, T. T., Fayetteville, N. C. Plasterers' head-support.....	Apr. 29, 1873	1, 108	350	3	488
140, 866	Wright, T. T., Memphis, Tenn. Medical compound.....	July 15, 1873	465	.....	4	65
	Wright, W., Newburgh, N. Y. Pump..... (Extension).....	Nov. 15, 1873	.....	.....	4	504
139, 224	Wright, W., New York, N. Y. Variable cut-off for steam-engines.....	May 20, 1873	692	218	3	577
144, 817	Wright, W., Newburgh, N. Y. Compound-engine.....	Nov. 18, 1873	557	189	4	546
144, 818	Same..... Frame for horizontal engines.....	Nov. 18, 1873	558	189	4	547
138, 727	Wright, W. A., East Haven, Conn., assignor to American Coal-Barge Company, Bristol, Conn. Unloading coal-barges.....	May 6, 1873	233	73	3	516
	Wright, W. G. (See Henderson & Wright.).....					
143, 802	Wrightson, T., Stockton-on-Tees, England. Apparatus for lowering weights.....	Oct. 21, 1873	394	130	4	430
142, 832	Wuerz, C., Kimmswick, Mo. Cut-off for cisterns, &c.....	Sept. 16, 1873	459	156	4	301
6, 537	Wunder, A., assignor to Sargent & Co., New Haven, Conn. Door latch and handle. (Design).....	Mar. 25, 1873	.....	.....	3	325
139, 988	Wurtele, A. C., New York, N. Y. Gyroscopic toy.....	June 17, 1873	502	159	3	672
137, 276	Wyatt, J. N., Baltimore, Md. Lamp-burner.....	Mar. 25, 1873	840	276	3	342
	Wyckoff, A., Elmira, N. Y. Hollow auger..... (Extension).....	July 12, 1873	.....	.....	4	36
143, 050	Wygant, J. H., C. Preston, and C. J. Westervelt, Hackensack, N. J. Disengaging towing-apparatus for boats.....	Sept. 23, 1873	650	222	4	327
143, 430	Wylé, J. H., assignor of one-half interest to A. Edwards, Philadelphia, Pa. Putting up alkalis for making soap.....	Oct. 7, 1873	31	.....	4	383
	Wylie, W. T. (See Hinman, W. W., assignor.).....					
136, 120	Wyman, G. D., Oshkosh, Wis. Plow.....	Feb. 18, 1873	669	219	3	205
	Wyman, G. M. (See Turbayne & Wyman.).....					
	Wyman, M. L. (See Moore & Wyman.).....					
145, 544	Wyman, S. T., Lynn, Mass. Blacking-box holder.....	Dec. 16, 1873	467	152	4	647
135, 742	Wynn, U., assignor of three-fourths interest to W. L. Patterson and J. G. Manahan, Sterling, Ill. Wagon-coupling.....	Feb. 11, 1873	328	105	3	165
136, 802	Wyttchenbach, F., Evansville, Ind. Kitchen-sink.....	Mar. 11, 1873	403	{ 133 } { 134 }	{ 3 }	287
141, 975	Xander, A., Slatinton, Pa. Sawing-machine.....	Aug. 19, 1873	518	171	4	194
139, 490	Yager, C. E., Hudson, N. Y. Flux for solder.....	June 3, 1873	43	.....	3	612
137, 162	Yale, H. M., Coldwater, Mich. Harvester.....	Mar. 25, 1873	735	244	3	334
135, 459	Yarrell, P. W., Garysburg, N. C. Turbine water-wheel.....	Feb. 4, 1873	63	20	3	132
142, 605	Yates, H. G., Kalamazoo, Mich. Pneumatic railway-car.....	Sept. 9, 1873	260	85	4	275
144, 589	Same..... Apparatus for conveying grain.....	Nov. 11, 1873	360	{ 121 } { 122 }	{ 4 }	519
143, 214	Yates, J. M., Princeville, Ill. Hoisting-machine.....	Sept. 23, 1873	777	268	4	338
137, 277	Yates, T., Milwaukee, Wis. Hot-air furnace.....	Mar. 25, 1873	841	276	3	342
143, 110	Same..... Harvester.....	Sept. 23, 1873	695	238	4	331
	Yeager, A. H. (See Yeager, J. L. and A. H.).....					
142, 833	Yeager, J. L. and A. H., Lampeter Square, Pa. Machine for upsetting tires.....	Sept. 16, 1873	460	156	4	301
142, 069	Yeiser, D. H., Danville, Ky. Portable stock-shed.....	Aug. 19, 1873	609	200	4	201
138, 064	Yentzer, E. S., Ottawa, Ill. Hemmer.....	Apr. 22, 1873	732	231	3	450
142, 319	Yerden, S. H., Stone Mills, N. Y. Rock-drill.....	Aug. 26, 1873	833	276	4	229
	Yerkes & Plumb. (See Yerkes, J., assignor.).....					
140, 334	Yerkes, E. A., Philadelphia, Pa. Manufacture of shovels.....	June 24, 1873	828	263	3	708
136, 479	Yerkes, J., assignor to Yerkes & Plumb, Philadelphia, Pa. Die for shaping hatchet-blanks.....	Mar. 4, 1873	109	36	3	254
142, 070	Same..... Die for forming hammers.....	Aug. 19, 1873	610	200	4	201
135, 682	Yinger, G., Harrisburgh, Pa. Portable cooking-apparatus.....	Feb. 11, 1873	282	88	3	162
	Yingling, J. A. (See Harrington & Yingling.).....					
	Yore, P. (See Hill, S. G., assignor.).....					
137, 278	York, J. S., assignor to self and J. H. Serene, Brooklyn, N. Y. Broiler-attachment for stoves and ranges.....	Mar. 25, 1873	842	277	3	342
137, 586	York, J. W., assignor of one-half interest to G. W. Morton, J. H. Murray, and T. B. Taylor, Nolensville, Tenn. Fertilizer.....	Apr. 8, 1873	285	88	3	391
140, 567	York, N., Boston, Mass. Die for making sheet-lead.....	July 1, 1873	193	65	4	24
138, 308	Yorks, R. M., Schoolcraft, Mich. Railway cattle-guard.....	Apr. 29, 1873	974	306	3	478
137, 812	Yost, G. W. N., Corry, Pa., assignor to Acme Mower and Reaper Company, New York, N. Y. Harvester.....	Apr. 15, 1873	494	154	3	421
137, 813	Same..... same.....	Apr. 15, 1873	495	155	3	421
137, 814	Same..... same.....	Apr. 15, 1873	496	155	3	421
137, 815	Same..... same.....	Apr. 15, 1873	497	155	3	421
137, 816	Same..... Seats for harvester.....	Apr. 15, 1873	497	155	3	422
137, 817	Same..... Mowing-machine.....	Apr. 15, 1873	498	156	3	422
135, 614	Youmans, W., Lansingburgh, N. Y. Railway car-truck.....	Feb. 4, 1873	212	66	3	144
	Young, A. K. (See De Forest & Gilbert, assignors)..... (Reissue.).....					
135, 615	Young, B. C., Boston, Mass. Modes of treating leather remnants.....	Feb. 4, 1873	214	.....	3	144
139, 644	Young, C. A., Providence, assignor of one-half interest to P. F. Brown, Manton, R. I. Band-saw.....	June 3, 1873	174	58	3	623
143, 051	Young, C. H., assignor to J. S. Crane and B. F. Peaslee, Lake Village, N. H. Knitting-machine.....	Sept. 23, 1873	650	{ 222 } { 223 }	{ 4 }	327
	Young, C. K. (See Blaisdell & Young.).....					
135, 394	Young, C. M., Meadville, Pa. Harvester.....	Jan. 28, 1873	838	{ 270 } { 271 }	{ 3 }	115
136, 121	Young, D. W., J. Hewitt, and L. Mooney, said Young and Mooney assignors to said Hewitt, Pittsburgh, Pa. Sad and fluting iron.....	Feb. 18, 1873	670	212	3	205
5, 529	Young, F. W., Holden, Mo. Seed-dropper..... (Reissue).....	Aug. 5, 1873	196	62	4	151
135, 743	Same..... same.....	Feb. 11, 1873	329	105	3	165
142, 320	Same..... same.....	Aug. 26, 1873	833	277	4	229
139, 225	Young, G. H., New York, N. Y. Carriage-top.....	May 20, 1873	693	218	3	577
	Young, H. (See Gibson, S., assignor.).....					
135, 055	Young, J. G., jr., Boston, Mass. Sail-bank.....	Jan. 21, 1873	525	170	3	77
139, 989	Young, J. H., Newburg, N. Y. Whip-socket.....	June 17, 1873	503	159	3	672
135, 504	Young, J. L., New York, N. Y. Earth-closet.....	Feb. 4, 1873	101	32	3	135
146, 119	Same..... same.....	Dec. 30, 1873	998	322	4	712
145, 711	Young, L. T., Philadelphia, Pa. Guide for cutting photographic pictures..... (Extension).....	Dec. 16, 1873	607	198	4	659
24, 598	Young, M., jr., Frederick, Md., assignor to C. H. and L. J. McCormick, Chicago, Ill. Harvesting-machine..... (Disclaimer filed).....	June 28, 1873	.....	.....	4	6
144, 044	Young, M. K., Glen Haven, Wis. Harrow.....	June 27, 1873	.....	.....	4	7
142, 321	Young, M. N., Kelseyville, Cal. Mill-pick.....	Oct. 28, 1873	620	205	4	459
		Aug. 26, 1873	834	277	4	230

Alphabetical list of patentees for the year 1873—Continued.

No.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
136, 353	Young, R., San Francisco, Cal. Securing lock-spindles in safe-doors	Feb. 25, 1873	888	286	3	235
142, 186	Young, S. D., Elizabethtown, Ill. Flux for smelting ores	Aug. 26, 1873	724	239	4	220
136, 297	Young, S. L., Scottville, Ill. Cultivator	Feb. 25, 1873	839	271	3	231
138, 221	Young, S. W., Providence, R. I. Eyelet	Apr. 22, 1873	865	274	3	461
	Young, W. (See Olbert & Young.)					
136, 950	Young, W., Easton, Pa. Apparatus for tapping water-mains	Mar. 18, 1873	538	178	3	307
137, 399	Same..... Stop for water-main attachments	Apr. 1, 1873	106	34	3	365
140, 607	Young, W., Baltimore, Md. Motor for sewing-machines	July 8, 1873	244	82	4	39
142, 755	Young, W., and J. Wortham, Shelbyville, Tenn. Clod-crusher and harrow combined	Sept. 9, 1873	387	130	4	245
139, 100	Young, W. S., Park's Corners, Ill. Washing-machine	May 20, 1873	576	181	3	568
	Youngblood, R. (See Youngblood, W., assignor.)					
135, 873	Youngblood, W., assignor to R. Youngblood, Brooklyn, N. Y. Eccentric fastening for boxes, &c	Feb. 11, 1873	444	144	3	174
5, 548	Zaiss, F., Philadelphia, Pa. Machine for making match-sticks	Aug. 19, 1873	626	206	4	203
136, 893	Same..... same	Mar. 18, 1873	491	163	3	303
141, 531	Zech, M., Pittsburgh, Pa. Spark-arrester	Aug. 5, 1873	104	32	4	143
143, 554	Zeh, A., G. P. Livingston, and P. V. W. Cullings, Gallupville, N. Y. Slide for extension-tables	Oct. 7, 1873	142	47	4	392
143, 215	Zeigler, A., Cumberland, Md. Car-coupling	Sept. 23, 1873	778	268	4	338
136, 894	Zeller, G., Brussels, Belgium. Breech-loading-fire-arm	Mar. 18, 1873	492	163	3	303
137, 995	Zellers, T. A., East Birmingham, Pa., assignor to T. B. Atterbury and W. Doyle. Jelly-glass	Apr. 15, 1873	647	204	3	434
145, 545	Zellwager, J., Louisville, Ky. Bridge-column	Dec. 16, 1873	468	153	4	647
	Zerbe, J. (See Epler, P., assignor.)					
135, 028	Zimmer, J., assignor of two-thirds interest to R. Sanderson and S. Curtis, Cleveland, Ohio. Metallic compounds for coating cutlery, &c	Jan. 21, 1873	500	.....	3	75
141, 976	Zimmer, S. B., Elkhart, Ind. Wood-grinding machine for making pulp	Aug. 19, 1873	518	172	4	194
138, 464	Zimmerman, H. J., Hudson, Mich. Railway-car spittoon	Apr. 29, 1873	1, 109	350	3	488
135, 255	Zink, S. H., Knobnoster, Mo. Car-coupling	Jan. 28, 1873	718	229	3	105
	Zippert, B. B. (See Gross & Zippert)					
139, 750	Zocher, C., Augusta, Ga. Cotton-cultivator	June 10, 1873	295	91	3	648
145, 712	Zschech, G., Indianapolis, Ind. Head-block for saw-mills	Dec. 16, 1873	608	{ 198 199 }	{ 4 }	659
	Zuberbuhler, E. (See Murset & Zuberbuhler.)					
141, 907	Zürcher, J., Lancaster, Pa. Loom	Aug. 19, 1873	467	153	4	190
144, 819	Zwicker, O., assignor to self and H. O. Hermann, Philadelphia, Pa. Milk-boiler	Nov. 18, 1873	559	190	4	547
144, 646	Zwietusch, O., Milwaukee, Wis. Soda-water draft-tube	Nov. 18, 1873	420	141	4	535
145, 774	Same..... Carbonic-acid-gas generator	Dec. 23, 1873	673	220	4	676

LIST OF PATENTS EXTENDED DURING THE YEAR 1873.

Number.	Name of inventor, invention, or discovery.	Date.
Original No. 24, 915	Adams, F. Casting copper-cylinders.	Aug. 2, 1859
Original No. 25, 862	Adams, J. M. Weeding-hoe.	Oct. 18, 1859
Original No. 23, 996	Ahl, D. Surgical-instrument.	May 17, 1859
Original No. 23, 886	Alden, M. Cultivator.	May 10, 1859
Original No. 26, 006	Allen, E. C. Corn-planter.	Nov. 8, 1859
Reissue No. 1, 934	Allender, J. Wringing-machine. (Reissued June 28, 1864; again reissued Nov. 8, 1864; and again reissued April 18, 1865)	Jan. 11, 1859
Reissue No. 2, 057	Amory, J. Steam-boiler furnace. (Reissued Aug. 29, 1865)	Apr. 19, 1859
Original No. 25, 936	Arnold, E. R. Cut-off valve of steam-engines.	Nov. 1, 1859
Original No. 25, 796	Babbett, A. Jacquard-machine.	Oct. 18, 1859
Original No. 25, 874	Babcock, G. H. Bronzing-machine.	Oct. 25, 1859
Reissue No. 2, 609	Bailey, S. A. Machine for wringing clothes. (Reissued June 28, 1864; reissued May 14, 1867)	Apr. 5, 1859
Original No. 25, 797	Ball, E. Harvester.	Oct. 18, 1859
Original No. 24, 531	Beaumont, W. Gas-retort.	June 28, 1859
Reissue No. 2, 326	Bellinger, E. Composition for kindling fires. (Reissued Aug. 7, 1866)	Dec. 13, 1859
Original No. 24, 923	Betteley, A. Elevator for warehouses, factories, mines, &c.	Aug. 2, 1859
Original No. 24, 987	Billinghurst, W. Fishing-reel.	Aug. 9, 1859
Original No. 23, 152	Blair, J. B. Attachment to ruling-machine.	Mar. 8, 1859
Original No. 23, 750	Blake, A. S. Animal-trap.	Apr. 26, 1859
Original No. 26, 410	Blessing, W. Seed-planter.	Dec. 13, 1859
Original No. 26, 243	Boch, W., sr. Water-closet basin.	Nov. 29, 1859
Reissue No. 1, 826	Booth, J. L. Grain-separator. (Reissued Sept. 25, 1860; reissued Nov. 29, 1864)	Sept. 20, 1859
Original No. 23, 820	Boss, J. Manufacture of watch-cases.	May 3, 1859
Original No. 24, 367	Bourne, W. O. Ore-separator.	June 14, 1859
Original No. 25, 239	Boyd, J. C. Elastic-hose tubing.	Aug. 30, 1859
Original No. 26, 321	Broadmeadow, J. P. Molding for metal-casting.	Nov. 29, 1859
Reissue No. 3, 405	Brodie, G. Metallic band for baling. (Reissued April 27, 1869)	Mar. 22, 1859
Reissue No. 1, 530	Burnham, N. F. Water-wheel. (Reissued Sept. 1, 1863)	Feb. 22, 1859
Reissue No. 3, 770	Burton, B. Breech-loading fire-arm. (Reissued Dec. 21, 1869)	Dec. 20, 1859
Original No. 23, 525	Buxton, L. W. Bedstead-fastening.	Apr. 5, 1859
Original No. 23, 445	Chambers, C., jr. Paper-folding machine.	Apr. 5, 1859
Reissue No. 5, 533	Same. same. (Reissued Aug. 12, 1873)	Nov. 15, 1859
Original No. 25, 807	Clark, L. Hem-folder.	Oct. 18, 1859
Reissue No. 3, 333	Coe, J. H., and W. B. Sniffin. Skate-fastening. (Reissued Mar. 23, 1869)	May 3, 1859
Reissue No. 5, 407	Collins, J. P. Water-wheel. (Reissued June 12, 1860; reissued May 13, 1873)	Dec. 6, 1859
Original No. 26, 415	Conant, H. Machine for winding thread on spools. (Antedated June 22, 1859)	Dec. 13, 1859
Original No. 26, 564	Cook, J., and H. I. Kimball. Top-prop for carriages.	Dec. 27, 1859
Original No. 25, 544	Cook, J. F. Try-cock.	Sept. 20, 1859
Original No. 23, 536	Coston, B. F. Pyrotechnic night-signal.	Apr. 5, 1859
Original No. 24, 199	Covel, E. H. Gas-regulator.	May 31, 1859
Original No. 24, 200	Same. Hydro-carbon vapor apparatus.	May 31, 1859
Original No. 24, 009	Crowell, C. L., and R. Smith. Machine for upsetting tire.	May 17, 1859
Original No. 24, 446	Daniels, R. Straw-cutter.	June 21, 1859
Original No. 25, 814	Danner, J. Sleeping-car.	Oct. 18, 1859
Reissue No. 1, 431	Davis, A. B. Car spring. (Reissued Jan. 6, 1863; again reissued March 17, 1863)	Feb. 15, 1859
Original No. 25, 726	Davis, B. C. Hand-machine for wiring blind-rods.	Oct. 11, 1859
Original No. 25, 183	Dodge, D. Nail-machine.	Aug. 23, 1859
Original No. 25, 309	Same. same.	Aug. 30, 1859
Original No. 22, 787	Same. Stove.	Feb. 1, 1859
Original No. 25, 395	Dodge, S., jr., and B. Potter, jr. Heel for boots and shoes.	Sept. 13, 1859
Reissue No. 2, 046	Draper, J. Skeleton-skirt. (Reissued Dec. 27, 1859; reissued Aug. 1, 1865)	Oct. 4, 1859
Original No. 23, 665	Dunklee, B. W. Cooking-range.	Apr. 19, 1859
Original No. 23, 882	Dyer, N. A. Cement for roofing.	May 3, 1859
Reissue No. 3, 063	Evaus, T. Metallic ear for attaching handles to pails, &c. (Reissued Aug. 4, 1868)	June 21, 1859
Original No. 26, 484	Fairbanks, T. Platform-scales.	Dec. 20, 1859
Original No. 23, 060	Farmer, M. G. Electro-magnetic fire-alarm apparatus.	Feb. 22, 1859
Reissue No. 5, 181	Same. Electro-magnetic telegraph. (Reissued Dec. 10, 1872)	Nov. 15, 1859
Original No. 26, 262	Ferry, W. M., jr. Journal-box for saw-mill carriages.	Nov. 29, 1859
Original No. 22, 792	Field, S. T. Machine for manufacturing wooden troughs.	Feb. 1, 1859
Reissue No. 1, 463	Firth, J., and J. Ingham. Pipe-molding. (Reissued April 28, 1863)	Dec. 20, 1859
Original No. 25, 005	Fitts, B. Governor-valve.	Aug. 9, 1859
Original No. 22, 947	Foster, D. P. Wrench.	Feb. 15, 1859
Original No. 26, 487	Foster, W. and R. Screw-tap.	Dec. 20, 1859
Reissue No. 3, 415	Fox, J. Cracker-machine. (Reissued May 4, 1869)	Feb. 1, 1859
Original No. 25, 565	Fitz, J. and G. Rolling-mill.	Sept. 27, 1859
Reissue No. 3, 872	Gale, L. D. Apparatus for the manufacture of gas. (Reissued March 8, 1870)	Nov. 8, 1859
Reissue No. 3, 873	Same. Manufacture of gas. (Reissued March 8, 1870)	Nov. 8, 1859
Original No. 23, 022	Gardner, G. W. Molding covers for cook-stoves.	Feb. 22, 1859
Original No. 26, 177	Gately, D. C. Making rubber-beltting.	Nov. 22, 1859
Original No. 26, 178	Same. Rubber-beltting.	Nov. 22, 1859
Reissue No. 4, 744	Gold, S. F. Apparatus for heating buildings by steam. (Reissued Feb. 6, 1872)	June 21, 1859
Original No. 24, 734	Goodale, W. Machine for making paper-bags.	July 12, 1859
Original No. 25, 191	Same. same.	Aug. 23, 1859
Reissue No. 1, 129	Gore, J. Harvester.	Dec. 27, 1859
Original No. 24, 022	Gray, J. Sewing-machine.	May 17, 1859
Original No. 23, 643	Greene, J. F. Machinery for disintegrating waste felt fabrics.	Apr. 12, 1859
Reissue No. 2, 086	Same. Obtaining fibers from waste felted fabrics. (Reissued Oct. 10, 1865)	Apr. 12, 1859
Original No. 26, 584	Grosvenor, J. B. Machine for planing curved surfaces.	Dec. 27, 1859
Reissue No. 2, 136	Hale, A. W. Meat-mincer. (Reissued Dec. 26, 1865)	Mar. 15, 1859
Original No. 23, 085	Hale, E. J., and C. H. Chandler. Lamp.	Mar. 1, 1859
Reissue No. 4, 660	Halvorson, H. Lamp. (Reissued June 6, 1871; reissued Dec. 5, 1871)	Sept. 20, 1859
Original No. 25, 640	Harrison, J., jr. Steam-boiler.	Oct. 4, 1859
Original No. 26, 674	Hawse, B. B. Clothes-dryer.	Jan. 3, 1860
Original No. 25, 014	Hay, G. R. Machine for cutting out wooden-ware.	Aug. 9, 1859
Reissue No. 3, 996	Hayden, H. W. Brass kettle. (Extended seven years; reissued Feb. 13, 1866; reissued May 24, 1870; extended by act of Congress approved March 3, 1873) (Division B)	Dec. 16, 1851
Reissue No. 3, 995	Hayden, H. W. Machine for making kettles. (Extended seven years; reissued Feb. 13, 1866; reissued May 24, 1870; extended by act of Congress approved March 3, 1873) (Division A)	Dec. 16, 1851
Reissue No. 1, 526	Haynes, J. Wood-saw frame. (Reissued Aug. 25, 1863)	Aug. 9, 1859
Original No. 25, 115	Healy, B. S. Self-acting wagon-brake.	Aug. 16, 1859
Original No. 22, 802	Hedges, I. A. Mills for grinding cane, &c.	Feb. 1, 1859
Original No. 25, 508	Heinisch, R. Tailors' shears.	Sept. 20, 1859
Reissue No. 5, 335	Hendy, J. Double friction-coupling. (Reissued March 25, 1873)	Oct. 11, 1859
Original No. 24, 304	Hewitt, C. Machine for moving iron at the rolls.	June 7, 1859

List of patents extended during the year 1873—Continued.

No.	Name of inventor, invention, or discovery.	Date.
Reissue No. 5 305	Hicks, W. C. Sewing-machine (Reissued March 4, 1873) ..	Apr. 12, 1859
Reissue No. 4 429	Hoe, R. M. Feeding paper to printing-presses (Reissued June 20, 1871) ..	Aug. 23, 1859
Original No. 23, 172	Same..... Machine for printing railway and other tickets	Mar. 8, 1859
Original No. 24, 428	Hotchkiss, B. Trip-hammer	June 14, 1859
Original No. 25, 569	Howe, T. Bedstead-slat	Sept. 27, 1859
Original No. 23, 921	Hubbard, M. G. Harvesting-machine	May 10, 1859
Original No. 26, 679	Hulbert, L. T. Double seaming-machine	Jan. 3, 1860
Reissue No. 807	Jenkins, H. Ornamental connection of parts of an iron fence. (Reissued Sept. 6, 1859; extended seven years)	Jan. 13, 1852
Reissue No. 4 783	Jennison, G. C. Baker's oven	Feb. 1, 1859
Original No. 24, 563	Knight, E. C. Arranging couches in railway-cars	June 28, 1859
Original No. 25, 570	Same..... Mode of arranging couches in railway-cars	Sept. 27, 1859
Reissue No. 2 831	La Forme, F. J. Nursing-bottle	Nov. 29, 1859
Original No. 23, 924	Lamden, T. J. Mail-bag	May 10, 1859
Original No. 23, 032	Lane, T. W. Steam-pressure gage	Feb. 22, 1859
Original No. 25, 235	Lauth, B. Manufacture of iron	Aug. 23, 1859
Original No. 23, 983	Leonard, H. G. Cooking-stove	May 10, 1859
Original No. 26, 599	Lessig, S. Horse hay-rake	Dec. 27, 1859
Reissue No. 1 602	Lewis, D. D. Railway-frog	May 17, 1859
Reissue No. 3 354	Lewis, W. W. Machine for rolling horseshoe iron	Feb. 1, 1859
Original No. 23, 097	Littlejohn, H. Machine for crozing and chamfering barrels	Mar. 1, 1859
Reissue No. 1 981	Lockwood, W. E. Lady's collar and cuff	Apr. 26, 1859
Reissue No. 1 982	Same..... same	Apr. 26, 1859
Reissue No. 5 259	Same..... same	Apr. 26, 1859
Original No. 25, 572	Lowe, J. A. Molding water-traps	Sept. 27, 1859
Original No. 26, 506	Same..... Water-trap	Dec. 20, 1859
Reissue No. 5 017	Lowry, J. L. Fire-plug	Feb. 22, 1859
Original No. 26, 689	Lowthrop, F. C. Pivot-bearings	Jan. 3, 1860
Original No. 25, 867	Maclure, J. Machine for covering saddle trees	Oct. 18, 1859
Original No. 25, 343	Manigle, E. M. Stove	Sept. 6, 1859
Original No. 25, 344	Mason, A. C. Machine for wiring the joints of clothes-pins	Sept. 6, 1859
Original No. 24, 748	Masury, J. W. Paint can	July 12, 1859
Original No. 22, 606	Mayall, T. J. Manufacture of emery wheels and sticks	Jan. 11, 1859
Reissue No. 5 111	Same..... Manufacture of India-rubber hose	Nov. 29, 1859
Original No. 25, 747	Same..... Method of combining emery with caoutchouc	Oct. 11, 1859
Original No. 25, 662	May, E. Construction of prisons	Oct. 4, 1859
Reissue No. 4 383	McQuiston, T. Cultivator	Oct. 18, 1859
Reissue No. 4 875	Melton, R. M. Cultivator	May 31, 1859
Original No. 24, 478	Merriman, A. T. Machine for sawing stone	June 21, 1859
Original No. 24, 700	Miller, L. and J. Harvester	July 5, 1859
Reissue No. 2 266	Miller, W. K. Harvester	Feb. 8, 1859
Reissue No. 2 267	Same..... same	Feb. 8, 1859
Reissue No. 2 268	Same..... same	Feb. 8, 1859
Reissue No. 2 269	Same..... same	Feb. 8, 1859
Reissue No. 2 270	Same..... same	Feb. 8, 1859
Original No. 25, 434	Mitchell, J. H. Cotton-scraper	Sept. 13, 1859
Original No. 22, 664	Monson, C. Holder for lamps	Jan. 18, 1859
Original No. 23, 105	Montgomery, J. Construction of steam-vessels	Mar. 1, 1859
Original No. 23, 598	Same..... Screw-propeller	Apr. 12, 1859
Original No. 24, 947	Montgomery, J. A. Journal-box	Aug. 2, 1859
Original No. 22, 742	Monroe, B. F. S. Bed-bottom	Jan. 25, 1859
Reissue No. 5 029	Murphy, T. H. Machine for rolling fabrics	May 17, 1859
Original No. 24, 654	Naramore, J. W. Pin-sticking machine	July 5, 1859
Reissue No. 3 725	Noel, T. Spectacle-frame	Jan. 11, 1859
Original No. 25, 036	Norton, M. P. Postmarking stamp	Aug. 9, 1859
Reissue No. 3 226	Palmer, I. E. Tackle block .. (Reissued Sept. 8, 1853; reissued Apr. 11, 1865; reissued Dec. 8, 1868) ..	Nov. 1, 1859
Original No. 24, 432	Palmer, J. S. Rolling metal for jewelry	June 14, 1859
Reissue No. 2 730	Palser, J. B., and G. Howland. Apparatus for manufacture of paper-pulp. (Reissued July 3, 1860; reissued Aug. 13, 1867) ..	June 21, 1859
Reissue No. 2 731	Same..... Manufacture of paper-pulp .. (Reissued July 3, 1860; reissued Aug. 13, 1867) ..	June 21, 1859
Reissue No. 1 590	Same..... Preparation of straw for paper-pulp. (Reissued July 3, 1860; reissued Dec. 15, 1863) ..	June 21, 1859
Original No. 22, 668	Payn, B. Coloring and curing tobacco-stems	Jan. 18, 1859
Original No. 24, 953	Perry, J. G. Meat-cutter	Aug. 2, 1859
Original No. 23, 309	Pettee, S. E. Envelope	Mar. 22, 1859
Original No. 26, 003	Phelps, G. M. Telegraphic-machine	Nov. 1, 1859
Reissue No. 5 304	Philip, P. Method of operating windlass	July 12, 1859
Reissue No. 3 413	Pierce, B. S. and M. R. Machine for making drain-pipes. (Reissued Feb. 28, 1865; reissued Jan. 14, 1868; reissued April 27, 1869) ..	Apr. 19, 1859
Original No. 26, 614	Pierce, B. S. and M. R. Manufacture of porous ware	Dec. 27, 1859
Original No. 24, 402	Pitkin, A. P. Steam-pressure regulator	June 14, 1859
Original No. 23, 491	Pitman, G. W., and W. C. Boone. Machinery for laying rope	Apr. 5, 1859
Original No. 23, 001	Porter, L. P. Elastic toys	Feb. 15, 1859
Original No. 22, 890	Pratt, N. B. Carpet-sweeper	Feb. 8, 1859
Reissue No. 5 095	Prindle, D. R. Portable furnace, boiler, and steamer. (Reissued Dec. 13, 1859; reissued Oct. 8, 1872) ..	Sept. 13, 1859
Reissue No. 1 382	Printon, J., jr. Machine for lasting boots and shoes	Oct. 4, 1859
Reissue No. 1 606	Putnam, H. W. Bottle-stopper fastening	Mar. 15, 1859
Reissue No. 4 824	Ray, S., and M. R. Shalters. Harvester. (Reissued April 17, 1866; reissued March 26, 1872.) (Division A) ..	Apr. 19, 1859
Reissue No. 4 826	Same..... Harvester. (Reissued April 17, 1866; reissued March 26, 1872.) (Division C) ..	Apr. 19, 1859
Reissue No. 4 589	Riggs, J. W. Truss-springs	Jan. 18, 1859
Original No. 23, 950	Root, S. E. Clock dial	May 10, 1859
Original No. 25, 586	Ross, A. Q. Burglar-alarm	Sept. 27, 1859
Original No. 23, 399	Russell, I. S. and H. R. Harvester	Mar. 29, 1859
Original No. 24, 493	Sabbaton, P. A. Door-frame for furnaces	June 21, 1859
Original No. 24, 664	Sanborn, G. P., and W. Mansfield. Elastic railway-frog	July 5, 1859
Original No. 24, 665	Selleck, T. Protecting surfaces of articles of iron	July 5, 1859
Reissue No. 2 476	Sexton, S. B. Heating-stove. (Reissued Dec. 3, 1861; reissued Feb. 16, 1864; reissued Sept. 27, 1864; reissued Feb. 12, 1867) ..	Apr. 19, 1859
Reissue No. 1 622	Same..... Stove .. (Reissued Dec. 3, 1861; reissued Feb. 16, 1864) ..	Apr. 19, 1859
Reissue No. 2 480	Sharps, C. Many-barreled fire-arm. (Reissued June 18, 1861; reissued Feb. 12, 1867.) (Division A) ..	Jan. 25, 1859
Original No. 25, 767	Shrote, J. H. Cutting and panning cakes	Oct. 11, 1859
Original No. 24, 635	Shuler, I. C. Construction of sheet-metal coffins	July 5, 1859
Reissue No. 3 070	Silverthorn, N. Boot and shoe tip	Nov. 29, 1859
Original No. 26, 060	Simpson, J. Machine for making box-joints	Nov. 8, 1859
Reissue No. 2 576	Spofford, N. Brace for bits	Nov. 1, 1859
Original No. 23, 320	Sprague, A. M. Apparatus for skimming surface of water in steam-boilers	Mar. 22, 1859

List of patents extended during the year 1873—Continued.

Number.	Name of inventor, invention, or discovery.	Date.
Original No. 23, 957	Spring, C. and A. Lathe for turning irregular forms	May 10, 1859
Reissue No. 1, 985	Stacy, C. L. Hydrant (Reissued June 6, 1865) ..	Oct. 4, 1859
Original No. 23, 792	Stanwood, J. E. Gas-pipe cutter	Apr. 26, 1859
Original No. 24, 668	Stearns, W. Picker-motion for power-loom	July 5, 1859
Reissue No. 2, 915	Stewart, P. P. Cooking-stove. (Reissued May 17, 1864; reissued April 7, 1868) ..	Apr. 12, 1859
Reissue No. 3, 452	Same..... Cooking-stove. (Reissued May 31, 1864; again reissued July 7, 1868; again reissued May 18, 1869)	Jan. 18, 1859
Original No. 23, 795	Stock, F. and J. Pump-box	Apr. 26, 1859
Reissue No. 3, 481	Stoddard, J. C. Hay-spreader	June 28, 1859
Original No. 24, 161	Strong, F. M., and T. Ross. Platform-scales. (Reissued June 1, 1869) ..	May 24, 1859
Original No. 25, 148	Same..... Weighing-scales.	Aug. 16, 1859
Original No. 25, 149	Sturtevant, B. F. Blank for shoe-pegs	Aug. 16, 1859
Original No. 26, 627	Same..... Lathe-attachment for cutting veneers	Dec. 27, 1859
Reissue No. 4, 626	Taggart, S. Flour-packer	Aug. 2, 1859
Reissue No. 3, 682	Taylor, L. Mop-head ... (Reissued Nov. 10, 1868; reissued Nov. 24, 1868; reissued Oct. 19, 1869) ..	Feb. 15, 1859
Reissue No. 1, 405	Temple, J. Water-wheel	Feb. 8, 1859
Reissue No. 3, 985	Terry, S. B. Machine for making paper boxes	Sept. 6, 1859
Reissue No. 4, 699	Tompkins, S. E., and J. Maclure. Harness-saddle tree	Feb. 1, 1859
Original No. 25, 061	Tufts, O. Elevator or hoisting apparatus for hotels, &c. (Reissued Jan. 2, 1872) ..	Aug. 9, 1859
Original No. 25, 473	Turnbull, A. Scales	Sept. 13, 1859
Reissue No. 1, 805	Vogel, K. Sewing-machine	Oct. 4, 1859
Reissue No. 1, 146	Vose, W. T. Portable pump	Nov. 15, 1859
Original No. 24, 512	Ward, A. Body-bolster for railway-cars	June 21, 1859
Reissue No. 2, 434	Ward, W. E. Machine for making nuts	Oct. 7, 1856
Original No. 24, 436	Webb, H. Railway-bar	June 14, 1859
Original No. 26, 145	Wellington, D. Cock for water-closet	Nov. 15, 1859
Reissue No. 1, 586	Wesson, M. Channeling soles of boots and shoes	May 24, 1859
Reissue No. 942	Wharton, W., jr. Dispensing with switches on railways	Dec. 13, 1859
Original No. 25, 499	Wheeler, E. Railway-car seat	Sept. 20, 1859
Original No. 24, 685	White, E. B. Alarm-attachment for tills	July 5, 1859
Original No. 23, 520	White, L. S. Burnishing-machine	Apr. 5, 1859
Original No. 23, 970	Widmann, J. G. Stove	May 10, 1859
Original No. 26, 136	Wiebé, E. Mode of advertising	Nov. 15, 1859
Reissue No. 1, 025	Wilhelm, C. and A. C. Lamp-shade	May 3, 1859
Original No. 23, 635	Williams, C. W. Gate for canal-locks	Apr. 12, 1859
Original No. 25, 167	Wilson, A. Mode of lighting gas by electricity	Aug. 16, 1859
Original No. 23, 735	Wilson, J., C. Green, and W. Wilson, jr. Double-seaming machine	Apr. 19, 1859
Original No. 23, 736	Same..... Machine for corrugating sheet-metal	Apr. 19, 1859
Reissue No. 3, 757	Same..... Powder-keg	July 12, 1859
Reissue No. 2, 050	Winslow, A. P. Roof for railway-cars	Aug. 9, 1859
Original No. 24, 257	Woodruff, T. T. Seat and couch for railway-car	May 31, 1859
Original No. 24, 688	Worcester, L. Machine for boring or mortising blind-stiles	July 5, 1859
Original No. 24, 689	Worthen, W. E., and H. B. Renwick. Corrugating sheet-metal	July 5, 1859
Original No. 24, 838	Worthington, H. R. Pumping engine	July 19, 1859
Original No. 26, 139	Wright, W. Pump	Nov. 15, 1859
Reissue No. 2, 204	Wyckoff, A. Hollow auger	July 12, 1859
Reissue No. 3, 978	Young, M., jr. Harvester-rake	June 28, 1859

LIST OF TRADE-MARKS REGISTERED DURING THE YEAR 1873.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1, 537	Abbott & Howard, Boston, Mass., and New York, N. Y. Emery	Nov. 12, 1873	Nov. 25, 1873
1, 527	Adams, Hallock & Co., Brooklyn, N. Y. Ice-pitchers	July 18, 1873	Nov. 18, 1873
1, 503	Agresta, A. P., and A. Menucci, New York, N. Y. Sauces	July 9, 1873	Oct. 21, 1873
1, 137	Allen & Ellis, Cincinnati, Ohio. Chewing-tobacco	Feb. 12, 1873	Feb. 18, 1873
1, 138	Same.....same	Feb. 12, 1873	Feb. 18, 1873
1, 139	Same.....same	Feb. 12, 1873	Feb. 18, 1873
1, 314	Same.....same	June 7, 1873	June 17, 1873
1, 315	Same.....same	June 7, 1873	June 17, 1873
1, 316	Same.....same	June 7, 1873	June 17, 1873
1, 317	Same.....same	June 7, 1873	June 17, 1873
1, 318	Same.....same	June 7, 1873	June 17, 1873
1, 430	American Lead Pencil Company, New York, N. Y. Pencils	Aug. 9, 1873	Sept. 2, 1873
1, 280	American Sardine Company, New York, N. Y. Fish	May 15, 1873	May 20, 1873
1, 428	Amison, L., & Co., New York, N. Y. Boot and shoe blacking	Sept. 27, 1873	Oct. 14, 1873
1, 489	Same.....Blacking or grease for shoes, &c	Sept. 27, 1873	Oct. 14, 1873
1, 361	Arquimbau, D. V., New York, N. Y. Licorice-paste	June 28, 1873	July 15, 1873
1, 442	Arquimbau, D. V., Brooklyn, N. Y. Licorice-paste	Aug. 30, 1873	Sept. 9, 1873
1, 299	Arnold & McNary, New York, N. Y. Druggist's goods	June 2, 1873	June 10, 1873
1, 460	Atlantic Refining Company, Philadelphia, Pa. Petroleum	Sept. 8, 1873	Sept. 16, 1873
1, 371	Atkins, E. C., & Co., Indianapolis, Ind. Cross-cut wood-saws	June 18, 1873	July 22, 1873
1, 473	Atwood & Bodwell, San Francisco, Cal. Windmill	Aug. 16, 1873	Sept. 30, 1873
1, 528	Babbitt, B. T., New York, N. Y. Soap-powders	June 25, 1873	Nov. 18, 1873
1, 529	Same.....Baking-powder	June 25, 1873	Nov. 18, 1873
1, 130	Bailey Washing and Wringing Machine Company, Woonsocket, R. I. Clothes-wringer	Feb. 11, 1873	Feb. 18, 1873
1, 131	Same.....same	Feb. 11, 1873	Feb. 18, 1873
1, 474	Barnes, Adams & Co., Baltimore, Md. Packed oysters and fruits	Sept. 24, 1873	Sept. 30, 1873
1, 281	Barnett, G. & H., Philadelphia, Pa. Files and rasps	Apr. 28, 1873	May 27, 1873
1, 329	Barnum, F. W., & Co., Danbury, Conn. Medicinal preparation	June 9, 1873	June 24, 1873
1, 362	Bass, D., jr., Woonsocket, R. I. Quill-bobbins	June 28, 1873	July 15, 1873
1, 278	Batchelor Brothers, Philadelphia, Pa. Cigars, tobacco, and snuff	May 5, 1873	May 20, 1873
1, 107	Beach, A., Iowa City, Iowa. Writing-paper	Dec. 27, 1872	Jan. 28, 1873
1, 199	Bell, W. G., & Co., Boston, Mass. Hams and cured meats	Mar. 27, 1873	Apr. 8, 1873
1, 218	Bell, R. W., & Co., Buffalo, N. Y. Soap	Jan. 29, 1873	Apr. 22, 1873
1, 578	Benedict, O., & Co., Bethel, Conn. Hats	Dec. 12, 1873	Dec. 23, 1873
1, 579	Same.....same	Dec. 12, 1873	Dec. 23, 1873
1, 580	Same.....same	Dec. 12, 1873	Dec. 23, 1873
1, 383	Berlin Mineral Water Company, Boston, Mass. Ginger ales, seltzer, champagne, cider, soda-water, &c	July 17, 1873	July 29, 1873
1, 461	Bernstein and Mack, New York, N. Y. Woven silk fabric and passementerie goods	Sept. 13, 1873	Sept. 23, 1873
1, 439	Beymer, Bauman & Co., Pittsburgh, Pa. White lead	June 21, 1873	Sept. 2, 1873
1, 319	Bigelow, H. H., Worcester, Mass. Boots and shoes	June 6, 1873	June 17, 1873
1, 352	Bishop, N. H., Manahawken, N. J. Packages containing cranberries	June 27, 1873	July 8, 1873
1, 565	Bishop, R. M., & Co., Cincinnati, Ohio. Soap	Aug. 26, 1872	Dec. 9, 1873
1, 511	Blakely, L. M., New York, N. Y. Shingles	Oct. 6, 1873	Oct. 28, 1873
1, 142	Blow, W. T., Saint Louis, Mo. Eye-salve	Nov. 15, 1872	Feb. 25, 1873
1, 504	Boker, H., & Co., New York, N. Y. Razors	Oct. 11, 1873	Oct. 21, 1873
1, 451	Bonsall, S., Philadelphia, Pa. Medicine	Sept. 9, 1873	Sept. 16, 1873
1, 174	Boston and Fairhaven Iron Works. (See Tripp, J. C., assignor.)		
1, 175	Boston Elastic Fabric Company, Boston, Mass. Rubber hose	Mar. 10, 1873	Mar. 18, 1873
1, 187	Same.....same	Mar. 10, 1873	Mar. 18, 1873
1, 187	Bourquin Brothers, New York, N. Y. Watches and watch materials	Mar. 10, 1873	Apr. 1, 1873
1, 389	Bradley, C. D., Taunton, Mass. Medicinal composition	July 23, 1873	July 29, 1873
1, 263	Bredt, F., & Co., New York, N. Y. Colors, dye-stuffs, chemicals, &c	Apr. 28, 1873	May 13, 1873
1, 166	Bremer's Sons, L., Philadelphia, Pa. Smoking and chewing tobacco	Feb. 15, 1873	Mar. 18, 1873
1, 167	Same.....same	Feb. 15, 1873	Mar. 18, 1873
1, 232	Bridgeport Cold-swaged Needle Company, Bridgeport, Conn. Cold-swaged sewing-machine needles	Mar. 28, 1873	Apr. 29, 1873
1, 211	Browett, F., & Co., Coventry, England. Frillings, gimps, ribbons, &c	Oct. 26, 1872	Apr. 15, 1873
1, 233	Same.....Frillings	Apr. 19, 1873	Apr. 29, 1873
1, 286	Brown Brothers, Erie, Pa. Petroleum	May 14, 1873	June 3, 1873
1, 570	Brown Cotton-gin Company, New London, Conn. Cotton-gin	Nov. 22, 1872	Dec. 9, 1873
1, 372	Brownson Brothers & Co., Chicago, Ill. Scarfs, ties, and bows	June 23, 1873	July 22, 1873
1, 525	Buffalo Dental Manufacturing Company, Buffalo, N. Y. Thermometer-tubes	Sept. 24, 1873	Nov. 11, 1873
1, 344	Bullard, J. H., Chicopee Falls, Mass. Machine-wound bobbins or spools for sewing-machine shuttles	June 20, 1873	July 1, 1873
1, 300	Bumgardner, J., & Sons, Staunton, Va. Whisky	Apr. 3, 1873	June 10, 1873
1, 282	Burnham, E. R., Chicago, Ill. Medical compound	May 19, 1873	May 27, 1873
1, 141	Burt & Mears, New York, N. Y. Boots and shoes	Feb. 3, 1873	Feb. 18, 1873
1, 417	Bush, C. G., & Co., Providence, R. I. Kaleidoscope	Aug. 6, 1873	Aug. 26, 1873
1, 182	Bussey, McLeod & Co., Troy, N. Y. Cooking-stoves	Mar. 14, 1873	Mar. 25, 1873
1, 498	Candee & Company. The L., New Haven, Conn. India-rubber boots	Sept. 5, 1873	Oct. 14, 1873
1, 301	Cassard, C. & Son., Baltimore, Md. Hog-products	May 27, 1873	June 10, 1873
1, 393	Cassidy, J. E., Boston, Mass. Whisky	Apr. 8, 1872	Aug. 5, 1873
1, 505	Cately, M. S., New York, N. Y. Rubber-goods	June 10, 1873	Oct. 21, 1873
1, 200	Cazade & Crooks, New York, N. Y. Bottles of brandy	Feb. 8, 1873	Apr. 8, 1873
1, 234	Same.....Bottles for brandy	Apr. 12, 1873	Apr. 29, 1873
1, 244	Same.....Caps of bottles of cordials, &c	Apr. 12, 1873	May 6, 1873
1, 245	Same.....Packages of cordials, &c	Apr. 12, 1873	May 6, 1873
1, 246	Same.....Bottles of cordials, &c	Apr. 12, 1873	May 6, 1873
1, 247	Same.....same	Apr. 12, 1873	May 6, 1873
1, 102	Celluloid Manufacturing Company, Albany, N. Y. Compound of pyroxyline	Sept. 14, 1872	Jan. 14, 1873
1, 176	Chandler, J., Pioneer, Pa. Product of petroleum	Mar. 6, 1873	Mar. 25, 1873
1, 418	Chase Brothers & Woodward, Rochester, N. Y., and Augusta, Me. Seeds, bulbs, vines, and cuttings	July 25, 1873	Aug. 26, 1873
1, 506	Chillingworth, W., & Son, London, England. Champagne	Aug. 21, 1873	Oct. 21, 1873
1, 157	Chisholm, J. W., New York, N. Y. Chemical compound	Feb. 21, 1873	Mar. 4, 1873
1, 108	Christy & Hughes, Clyde, Ohio. Pruning-shears	Dec. 3, 1872	Jan. 28, 1873
1, 431	Clackner, M. T., assignor to M. Kohlerman, Baltimore, Md. Preparation for the hair	Aug. 20, 1873	Sept. 2, 1873
1, 204	Cleve, J., Boston, Mass. Bitters	Apr. 1, 1873	Apr. 8, 1873
1, 330	Clinton, E., & Co., Philadelphia, Pa. Varnish-brush	Feb. 27, 1873	June 24, 1873
1, 143	Clow, J. B., Allegheny City, Pa. Pearl wheat	Feb. 18, 1873	Feb. 25, 1873
1, 267	Coffin, Reddington & Co., New York, N. Y. Polishing material	May 5, 1873	May 13, 1873
1, 126	Collins Company, Collinsville, Conn. Axes and hatchets	Feb. 7, 1873	Feb. 11, 1873
1, 328	Same.....Axes and other tools	Dec. 30, 1872	June 17, 1873
1, 307	Consolidated Fruit-Jar Company, New York, N. Y., and New Brunswick, N. J. Fruit-jars	May 31, 1873	June 10, 1873
1, 308	Same.....same	May 31, 1873	June 10, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1,542	Consolidated Tobacco Company, Gilroy, Cal. Cigars and tobacco	Oct. 8, 1873	Nov. 25, 1873
1,201	Cook, T. G., & Co., Philadelphia, Pa. Glass-ware	Mar. 18, 1873	Apr. 8, 1873
1,123	Cornwell, W., Philadelphia, Pa. Charts and patterns for cutting dresses	Feb. 3, 1873	Feb. 11, 1873
1,287	Courvoisier, Wilcox & Co., New York, N. Y. Watches	May 9, 1873	June 3, 1873
1,144	Cox, S. E., & Co., New York, N. Y. Compound for cleaning and dressing harness	Feb. 1, 1873	Feb. 25, 1873
1,413	Coyne, J., Pittsburgh, Pa. Selected nails	Aug. 5, 1873	Aug. 19, 1873
1,145	Crane & Co., New York, N. Y. Pickles and sauces	Feb. 19, 1873	Feb. 25, 1873
1,153	Crawford, W. H., & Co., Baltimore, Md. Coffee, spices, &c	Feb. 25, 1873	Mar. 4, 1873
1,168	Crocker Cutter-Tooth File Company, Norwich, Conn. Files	Feb. 26, 1873	Mar. 18, 1873
1,481	Culbert, J. W., New York, N. Y. Gin	Sept. 27, 1873	Oct. 7, 1873
1,309	Cutler, D. C., Carthage, Ill. Books	May 24, 1873	June 10, 1873
1,462	Cutts, O., & Co., Port au Prince, Hayti. Hard soap	July 12, 1873	Sept. 23, 1873
1,103	Daddow, S. H., Saint Clair, Pa. Blasting squibs and fuses	Oct. 29, 1872	Jan. 21, 1873
1,507	Davis, A. M., & R., New York, N. Y. Umbrellas	Sept. 15, 1873	Oct. 21, 1873
1,566	Davis, W. H., & Co., Cincinnati, Ohio. Cured meats	Nov. 7, 1873	Dec. 9, 1873
1,104	Dawes & Fanning, New York, N. Y. Umbrellas and parasols	Jan. 11, 1873	Jan. 21, 1873
1,099	De Bary, F., & Co., New York, N. Y. Champagne wine	Dec. 31, 1872	Jan. 7, 1873
1,105	Same.....Cigars	Dec. 31, 1872	Jan. 21, 1873
1,109	Same.....same	Jan. 18, 1873	Jan. 28, 1873
1,302	De Grath, S., Jersey City, N. J. Medicine	May 24, 1873	June 10, 1873
1,394	Same.....same	June 30, 1873	Aug. 5, 1873
1,251	Delano, G., New Bedford, Mass. Candles	Apr. 28, 1873	May 6, 1873
1,443	Derby & Day, Saint Louis, Mo. Whisky	Aug. 30, 1873	Sept. 9, 1873
1,490	Same.....Barrels of whisky	Aug. 30, 1873	Oct. 14, 1873
1,463	Devlan, P. S., New York, N. Y. Packing for railway-car journal-boxes	Sept. 20, 1873	Sept. 23, 1873
1,337	Devoe Manufacturing Company, New York, N. Y. Illuminating-oil	June 16, 1873	June 24, 1873
1,338	Same.....same	June 16, 1873	June 24, 1873
1,373	Dick, D., New York, N. Y. Medicine	July 14, 1873	July 22, 1873
1,363	Dilworth Bros., Pittsburgh, Pa. Roasted coffee	June 13, 1873	July 15, 1873
1,452	Disston, H., & Sons, Philadelphia, Pa. Saws, tools, steel, and files	Aug. 1, 1873	Sept. 16, 1873
1,464	Same.....same	Sept. 11, 1873	Sept. 23, 1873
1,478	Dodd, Tarr & Co., Gloucester, Mass. Prepared and preserved fish	Sept. 24, 1873	Sept. 30, 1873
1,479	Doherty, M., & Co., Boston, Mass. Brandies	Sept. 22, 1873	Sept. 30, 1873
1,384	Dole Bros., Boston, Mass. Bluing-paper	July 17, 1873	July 29, 1873
1,401	Domestic Sewing-Machine Company, New York, N. Y. Patterns of paper, cloth, &c	July 29, 1873	Aug. 12, 1873
1,402	Same.....Dress-patterns	July 29, 1873	Aug. 12, 1873
1,571	Dornan, J., Philadelphia, Pa. Carpets	Oct. 30, 1873	Dec. 9, 1873
1,235	Dovell's Son, R. B., New York, N. Y. Sealing-wax	Feb. 8, 1873	Sept. 29, 1873
1,390	Draper, J. O., & Co., Pawtucket, R. I. Soap	June 14, 1873	July 29, 1873
1,444	Dueber, J. C., Cincinnati, Ohio. Watch-cases	Aug. 27, 1873	Sept. 9, 1873
1,450	Dueber Watch-Case Manufacturing Company, Cincinnati, Ohio. Gold rings	Aug. 27, 1873	Sept. 9, 1873
1,432	Dugdale, G., & Co., Baltimore, Md. Fertilizer	Aug. 21, 1873	Sept. 2, 1873
1,433	Same.....same	Aug. 21, 1873	Sept. 2, 1873
1,440	Same.....same	Aug. 21, 1873	Sept. 2, 1873
1,475	Same.....same	Aug. 21, 1873	Sept. 30, 1873
1,476	Same.....same	Aug. 21, 1873	Sept. 30, 1873
1,374	Dunbar, C. and E. E., Waukesha, Wis. Mineral-water	July 2, 1873	July 22, 1873
1,340	Dunham, W. S., New York, N. Y. Liquors, wines, bitters, sirups, and cordials	June 23, 1873	July 1, 1873
1,419	Durkee, E. R., & Co., New York, N. Y. Spices, mustard, soda, and cream of tartar	July 12, 1873	Aug. 26, 1873
1,530	Same.....Compound spice for seasoning	Sept. 7, 1873	Nov. 18, 1873
1,219	Du Vivier & Co., New York, N. Y. Bourbon whisky	Apr. 14, 1873	Apr. 22, 1873
1,220	Same.....Rye whisky	Apr. 14, 1873	Apr. 29, 1873
1,221	Same.....Bourbon whisky	Apr. 14, 1873	Apr. 22, 1873
1,222	Same.....Rye whisky	Apr. 14, 1873	Apr. 22, 1873
1,132	Earickson & Harris, Saint Louis, Mo. Plug chewing-tobacco	Feb. 8, 1873	Feb. 18, 1873
1,586	Eavenson, J., & Sons, Philadelphia, Pa. Soap	Sept. 10, 1873	Dec. 23, 1873
1,491	Egbert, F. L., New York, N. Y. Corset steel-springs	Aug. 26, 1873	Oct. 14, 1873
1,567	Egbert, F. L., Waterbury, Conn., and New York, N. Y. Steel corset springs	Nov. 26, 1873	Dec. 9, 1873
1,160	Elkinton, J. S. and T., Philadelphia, Pa. Soap	Feb. 26, 1873	Mar. 11, 1873
1,264	Ellis, G. F., Terre Haute, Ind. Woolen goods	May 5, 1873	May 13, 1873
1,188	Emerson's Sons, T., Wakefield, Mass. Boots and shoes	Mar. 7, 1873	Apr. 1, 1873
1,189	Same.....same	Mar. 7, 1873	Apr. 1, 1873
1,545	Emery, Ivey & Lee, New York, N. Y. Dry goods	Oct. 25, 1873	Dec. 2, 1873
1,177	Engelke, B. H., Saint Louis, Mo. Whisky	Feb. 19, 1873	Mar. 25, 1873
1,205	Ersine & Co., New York, N. Y. Trimmings for ladies' wear	Mar. 15, 1873	Apr. 8, 1873
1,115	Evans Bros., Cincinnati, Ohio. Hams, &c	Jan. 24, 1873	Feb. 4, 1873
1,268	Evans, Lippincott & Cunningham, Cincinnati, Ohio. Sugar-cured hams	Apr. 16, 1873	May 13, 1873
1,169	Fairbanks & Gilman, New Orleans, La. Sirup	Mar. 10, 1873	Mar. 18, 1873
1,170	Same.....same	Mar. 10, 1873	Mar. 18, 1873
1,568	Fargo, E. A., & Co., San Francisco, Cal. Bourbon whisky	Nov. 25, 1873	Dec. 9, 1873
1,270	Farmer, H. R., Danville, Va. Flue for draft, ventilation, &c	May 10, 1873	May 20, 1873
1,288	Farr, W. A., & Co., Boston, Mass. Shirts	May 16, 1873	June 3, 1873
1,445	Fayerweather, J. S., & Co., Danbury, Conn. Hat	Aug. 27, 1873	Sept. 9, 1873
1,403	Fellows, T. S., and J. R. Smith, Wells, Minn. Medicine	July 5, 1873	Aug. 12, 1873
1,446	Fenton Manufacturing Company, Cleveland, Ohio. Medicines	Aug. 28, 1873	Sept. 9, 1873
1,447	Ferry, D. M., & Co., Detroit, Mich. Seeds	July 14, 1873	Sept. 9, 1873
1,465	Finlay, Gourlay & Finch, New York, N. Y. Shirts	Sept. 13, 1873	Sept. 23, 1873
1,522	Fisher, C. M., New York, N. Y. Gold pens	Nov. 1, 1873	Nov. 11, 1873
1,434	Fisk, Clark & Flagg, New York, N. Y. Men's furnishing goods	July 28, 1873	Sept. 2, 1873
1,140	Flack Bros., Canton, Md. Whiskies	Feb. 6, 1873	Feb. 18, 1873
1,414	Flaxland, E., & Co., Paris, France. Fancy and other dry goods	Aug. 1, 1873	Aug. 19, 1873
1,415	Same.....same	Aug. 1, 1873	Aug. 19, 1873
1,236	Fletcher & Dwyer, Lynn, Mass. Burnishing-ink	Mar. 17, 1873	Apr. 29, 1873
1,375	Same.....Stove-polish	July 7, 1873	July 22, 1873
1,448	Fliess, W. M., & Co., New York, N. Y. Whisky	Aug. 23, 1873	Sept. 9, 1873
1,248	Fox, J., Lansingburgh, N. Y. Sponge or butter crackers	Apr. 17, 1873	May 6, 1873
1,124	Frese, E., San Francisco, Cal. Medicinal compound	Feb. 6, 1873	Feb. 11, 1873
1,367	Friedmann & Lauterjung, New York, N. Y. Razors and cutlery	Apr. 26, 1873	July 15, 1873
1,265	Fuller, H. W., Chicago, Ill. Medicinal compound	May 8, 1873	May 13, 1873
1,320	Gail, G. W. and Ax., Baltimore, Md. Tobacco and snuff	Apr. 21, 1873	June 17, 1873
1,266	Galleo Mills Manufacturing Company, Richmond, Va. Flour	May 9, 1873	May 13, 1873
1,289	Gardner Manufacturing Company, Glen Gardner, N. J., and New York, N. Y. Seats for chairs, settees, and cars	May 29, 1873	June 3, 1873
1,190	Gein, L. H., New York, N. Y. Printing inks and varnishes	Mar. 22, 1873	Apr. 1, 1873
1,212	Gerdorn, Cook & Co., New York, N. Y. Lubricating compound	Sept. 26, 1872	Apr. 15, 1873
1,582	Giant-Powder Company and The Atlantic Giant-Powder Company, San Francisco, Cal. Dynamite explosive compound	Nov. 15, 1873	Dec. 23, 1873
1,583	Same.....Giant-powder explosive compound	Nov. 15, 1873	Dec. 23, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1,588	Gilmor & Gibson, Baltimore, Md. Cigars	Dec. 22, 1873	Dec. 30, 1873
1,435	Glanding, J., & Co., Philadelphia, Pa. Steam-packing	July 26, 1873	Sept. 2, 1873
1,436	Same	Aug. 23, 1873	Sept. 2, 1873
1,381	Gold Heating Company, New York, N. Y. Heaters	July 12, 1873	July 22, 1873
1,453	Goldsmith Bros. & Benjamin, Chicago, Ill. Cigars	Sept. 2, 1873	Sept. 16, 1873
1,385	Goodell, D. H., Antrim, N. H. Apple-paring machines	July 10, 1873	July 29, 1873
1,237	Goodrich, M. S., & Co., Flint, Mich. Oils for medical purposes	Mar. 29, 1873	Apr. 29, 1873
1,508	Gordon & Dilworth, New York, N. Y. Preserved and canned food	Oct. 11, 1873	Oct. 21, 1873
1,501	Graham, J. L., Pittsburgh, Pa. Medicine	Oct. 9, 1873	Oct. 14, 1873
1,574	Greanelle Manufacturing Company, New York, N. Y. Goods made of a composition substitute for bone, horn, hard rubber, &c.	Dec. 9, 1873	Dec. 16, 1873
1,543	Great Eastern Tea Company, Terre Haute, Ind. Teas and coffees	Nov. 3, 1873	Nov. 25, 1873
1,531	Gregg, W. H., & Co., Elmira, N. Y. Medicine	Dec. 20, 1872	Nov. 18, 1873
1,538	Guanabani Guano Company, Petersburg, Va. Guano	Nov. 17, 1873	Nov. 25, 1873
1,410	Gullett Gin Manufacturing Company, Amite City, La. Cotton-gins	July 5, 1873	Aug. 19, 1873
1,353	Gunnison, A., & Co., Cincinnati, Ohio. Railway-greaser	June 27, 1873	July 8, 1873
1,523	Haley, Morse & Co., Boston, Mass. Clothes-wringing machines	Nov. 6, 1873	Nov. 11, 1873
1,110	Hall, Elton & Co., Wallingford, Conn. Spoons, forks, &c.	Jan. 23, 1873	Jan. 28, 1873
1,202	Harrison Bros. & Co., Philadelphia, Pa. Paints and colors	Mar. 28, 1873	Apr. 8, 1873
1,271	Hartell & Letchworth, Philadelphia, Pa. Medal	Apr. 28, 1873	May 20, 1873
1,272	Harwood, L., & Son, Warren, Mass. Salve	May 10, 1873	May 20, 1873
1,321	Hastings & Berlin, Saint Louis, Mo. Whisky	May 29, 1873	June 17, 1873
1,590	Hawley, Bowen & Co., San Francisco, Cal. Ground coffee	Dec. 22, 1873	Dec. 30, 1873
1,512	Haxall, Crenshaw & Co., Richmond, Va. Flour	Oct. 22, 1873	Oct. 28, 1873
1,513	Same	Oct. 22, 1873	Oct. 28, 1873
1,532	Hegle, F., New York, N. Y. Kid gloves	Nov. 7, 1873	Nov. 18, 1873
1,425	Heinz, Noble & Co., Pittsburgh, Pa. Celery sauce	Aug. 18, 1873	Aug. 26, 1873
1,426	Same	Aug. 18, 1873	Aug. 26, 1873
1,454	Heller, J., Chicago, Ill. Cigars	Sept. 3, 1873	Sept. 16, 1873
1,546	Hessenbruch, T., Philadelphia, Pa. Hardware, cutlery, guns, pistols, and lead-pencils	Nov. 13, 1873	Dec. 2, 1873
1,303	Hicks & Wolfe, Troy, N. Y. Stoves, heaters, and ranges	May 19, 1873	June 10, 1873
1,324	Hodkinson, M. T. D., and S., Marietta, Ohio, and Louisville, Ky. Oils	May 20, 1873	June 17, 1873
1,455	Hoffman, Lee & Co., Baltimore, Md. Moss-licorice	May 8, 1873	Sept. 16, 1873
1,456	Same	May 8, 1873	Sept. 16, 1873
1,238	Hopkins & Co., New York, N. Y. Prepared flour	Mar. 7, 1873	Apr. 29, 1873
1,206	Hopkins, J. H., Providence, R. I. Medical compound	Nov. 22, 1872	Apr. 8, 1873
1,364	Howe & Hubbell, Cincinnati, Ohio. Casks and other packages of whisky	June 28, 1873	July 15, 1873
1,572	Howe, E., New York, N. Y. Whisky	Sept. 8, 1873	Dec. 9, 1873
1,178	Hoyt, R., New York, N. Y. Medical preparation	Mar. 19, 1873	Mar. 25, 1873
1,420	Hughes, J. E., Kidderminster, England. Carpets, drugget, rugs, and mats	July 26, 1873	Aug. 26, 1873
1,427	Hume, T. L., Washington, D. C. Rye whisky	Aug. 22, 1873	Aug. 26, 1873
1,345	Hunt, Rankin & Lamar, Macon, Ga. Fertilizer	June 14, 1873	July 1, 1873
1,539	Hunter & Frost, Fredericksburgh, Va. Plows	Nov. 18, 1873	Nov. 25, 1873
1,376	Imhorst, H., New York, N. Y. Bottles of brandy	June 28, 1873	July 23, 1873
1,161	Irving, T. J. & Co., Baltimore, Md. Linen and muslin shirts	Feb. 28, 1873	Mar. 11, 1873
1,325	Jackson, J. A. & Co., Saint Louis, Mo. Blackberry brandy	May 28, 1873	June 17, 1873
1,111	Jacoby, S. & Co., New York, N. Y. Cigars	Jan. 14, 1873	Jan. 28, 1873
1,356	Jenkins, T. E., Louisville, Ky. Perfumery	July 3, 1873	July 8, 1873
1,100	Jenks, C. W., Somerville, Mass. Shirts	Dec. 30, 1872	Jan. 7, 1873
1,229	Jones, Williams & Faxon, Boston, Mass. Flour	Apr. 18, 1873	Apr. 22, 1873
1,146	Joseph, N., San Francisco, Cal. Cutlery	Dec. 9, 1872	Feb. 25, 1873
1,101	Jowitt, T. & Son, Sheffield, England. Files	Jan. 3, 1873	Jan. 7, 1873
1,466	Kearsarge Peg Company, Andover, N. H. Pegs for boots and shoes	Sept. 8, 1873	Sept. 23, 1873
1,467	Same	Sept. 8, 1873	Sept. 23, 1873
1,457	Keep, W. J., Troy, N. Y. Stoves	Sept. 12, 1873	Sept. 16, 1873
1,249	Kelly, E., New Bedford, Mass. Clock and watch oil	Apr. 14, 1873	May 6, 1873
1,516	Kenny & McPartland, New York, N. Y. Ladies and children's shoes	Oct. 30, 1873	Nov. 4, 1873
1,179	Kerbs & Spiess, New York, N. Y. Cigars	Mar. 15, 1873	Mar. 25, 1873
1,180	Same	Mar. 15, 1873	Mar. 25, 1873
1,468	Kidd, G. W. & Co., New York, N. Y. Spirituous liquors	Aug. 30, 1873	Sept. 23, 1873
1,587	Kidder, W., Goffstown, N. H. Liniment	Dec. 17, 1873	Dec. 23, 1873
1,239	Kimberly, F. H., Springfield, Mass. Salt-rheum ointment	Apr. 4, 1873	Apr. 29, 1873
1,365	Kinney, F. S., New York, N. Y. Cigars, cheroots, and cigarettes	June 21, 1873	July 15, 1873
1,171	Kinsman, F. W., Augusta, Me. Cough-balsam	Mar. 5, 1873	Mar. 18, 1873
1,213	Kipe & Townsend, Chadd's Ford, Pa. Kiln-dried corn-meal	Apr. 2, 1873	Apr. 15, 1873
1,524	Knickerbocker Ice Company, New York, N. Y. Ice	Nov. 3, 1873	Nov. 11, 1873
1,112	Knoeppel, W. H., New York, N. Y. Bitters	Jan. 24, 1873	Jan. 28, 1873
1,492	Kohlerman, M. (See Clackner, M. T., assignor.)		
1,283	Kohn, Leberman & Co., Philadelphia, Pa. Shirt	Sept. 23, 1873	Oct. 14, 1873
1,133	Kohn, T., Hartford, Conn. Braids, gimps, fringes, trimmings, &c.	May 19, 1873	May 27, 1873
1,273	Kowalski, W. A., New Orleans, La. Coal-oil	Dec. 12, 1871	Feb. 18, 1873
1,377	Laurencot, J. B., Hoboken, N. J. Watch glass	May 10, 1873	May 20, 1873
1,482	Leng & Ogden, New York, N. Y. Steel and iron	July 15, 1873	July 22, 1873
1,502	Same	Sept. 24, 1873	Oct. 7, 1873
1,304	Leonard & Ellis, New York and Brooklyn, N. Y. Lubricating-oils	Sept. 26, 1873	Oct. 14, 1873
1,310	Leshner, Whitman & Co., New York, N. Y. Silicias, and goods of like character	May 24, 1873	June 10, 1873
1,428	Lewis, F. C., Trenton, N. J. Raisins	May 31, 1873	June 10, 1873
1,252	Lewis, W. R., New York, N. Y. Alpaca	Aug. 22, 1873	Aug. 26, 1873
1,253	Libby, E. F., Allegheny City, Pa. Medicinal oil	Apr. 3, 1873	May 6, 1873
1,254	Liggett & Myers, Saint Louis, Mo. Plug chewing-tobacco	Apr. 23, 1873	May 6, 1873
1,255	Same	Apr. 23, 1873	May 6, 1873
1,256	Same	Apr. 23, 1873	May 6, 1873
1,311	Same	Apr. 23, 1873	May 6, 1873
1,331	Same	May 13, 1873	June 10, 1873
1,332	Same	June 16, 1873	June 24, 1873
1,421	Lilly & Phelan, Evansville, Ind. Pepsin	June 16, 1873	June 24, 1873
1,203	Lippincott, J. H., Pittsburgh, Pa. Baking-powder	Aug. 4, 1873	Aug. 26, 1873
1,536	Liszka, G. C., Williamsburgh, N. Y. Driers, paints, varnishes, &c.	Mar. 21, 1873	Apr. 8, 1873
1,517	Livingston & Co., San Francisco, Cal. Whisky	Nov. 8, 1873	Nov. 18, 1873
1,279	Livingston, H., Albany, N. Y. Bourbon whisky	Oct. 25, 1873	Nov. 4, 1873
1,378	Loewenthal, Kaufman & Co., Chicago, Ill. Smoking-tobacco	May 5, 1873	May 20, 1873
1,147	Long, G., Keytesville, Mo. Salve	June 16, 1873	July 22, 1873
1,581	Lorentz & Rittler, Baltimore, Md. Fertilizer	Feb. 19, 1873	Feb. 25, 1873
1,134	MacGowan, J. K. & Co., Philadelphia, Pa. Table-sauce	Dec. 12, 1883	D. c. 23, 1873
1,158	MacWilliams & Pieper, Baltimore, Md. Bread	Feb. 11, 1873	Feb. 18, 1873
1,368	Mandel, L. L., New York, N. Y. Varnish	Nov. 20, 1872	Mar. 4, 1873
1,274	Marshall Bros. & Co., Philadelphia, Pa. Black and galvanized sheet-iron	June 28, 1873	July 15, 1873
		Mar. 26, 1873	May 20, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1,493	Martin, J. M. C., New York, N. Y. Brushes.	Sept. 23, 1873	Oct. 14, 1873
1,191	Mauger, V. E., New York, N. Y. Playing-cards.	Mar. 15, 1873	Apr. 1, 1873
1,305	Mayo, H. & Co., Boston, Mass. Cured or smoked fish.	May 31, 1873	June 10, 1873
1,509	McCann, J., Beaumont Mills, near Drogheda, Ireland. Oat-meal.	Aug. 11, 1873	Oct. 21, 1873
1,181	McClelland, J. J., Austin, Tex. Whisky.	Nov. 30, 1872	Mar. 25, 1873
1,404	McCloskey Bro. & Co., Philadelphia, Pa. Paints and colors.	July 31, 1873	Aug. 12, 1873
1,416	McCullagh, S., London, England. Wines, liquors, beer, mineral-waters, &c.	Aug. 5, 1873	Aug. 19, 1873
1,117	McCullough Iron Company, Philadelphia, Pa. Galvanized sheet-iron.	Jan. 24, 1873	Feb. 4, 1873
1,118	Same.	Jan. 24, 1873	Feb. 4, 1873
1,357	Meissner, Ackermann & Co., New York, N. Y. Oil cans or packages.	June 25, 1873	July 8, 1873
1,214	Merchant's Gargling Oil Company, Lockport, N. Y. Liniment.	Dec. 23, 1872	Apr. 15, 1873
1,215	Same.	Dec. 23, 1872	Apr. 15, 1873
1,119	Merritt, C., South Weymouth, Mass. Boots and shoes.	Jan. 24, 1873	Feb. 4, 1873
1,322	Merwin, Hulbert & Co., New York, N. Y. Revolving pistols.	May 24, 1873	June 17, 1873
1,323	Same.	May 24, 1873	June 17, 1873
1,116	Metal Company, I. X. L., Saint Louis, Mo., and Sacramento, Cal. Antifriction metal and journal bearings.	Jan. 27, 1873	Feb. 4, 1873
1,223	Meyer, E. A. E., Watertown, N. Y. Hair-dressing.	Apr. 12, 1873	Apr. 22, 1873
1,533	Meyer, I. T. & Co., New York, N. Y. Cutlery.	Sept. 9, 1873	Nov. 18, 1873
1,224	Miller Bros., New York, N. Y. Cosmetic.	Apr. 10, 1873	Apr. 22, 1873
1,216	Miller, J. P., Baltimore, Md. Pile-remedy.	Mar. 25, 1873	Apr. 15, 1873
1,573	Miller, O. W. & Co., Baltimore, Md. Oysters.	Dec. 4, 1873	Dec. 9, 1873
1,290	Mintzer, S. L., Philadelphia, Pa. Tooth-brushes.	May 6, 1873	June 3, 1873
1,148	Moody Bros., Indianapolis, Ind. Baking-powder.	Feb. 17, 1873	Feb. 25, 1873
1,405	Moore, Tingue & Co., New York, N. Y. Alpaca and mohairs.	Mar. 8, 1873	Aug. 12, 1873
1,207	Morehead, Young & Co., Saint Louis, Mo., and Leavenworth, Kan. Whisky.	Apr. 2, 1873	Apr. 8, 1873
1,534	Morrison, A. B., Portland, Me. Gold and silver solutions for electroplating without a battery.	Oct. 9, 1873	Nov. 18, 1873
1,333	Morrow, Chamberlain & Co., New York, N. Y. Wines and liquors.	June 12, 1873	June 24, 1873
1,358	Moss, J. L., jr., and N. F. Moss, Westerly, R. I., and New York, N. Y. Shirtings.	Mar. 20, 1873	July 8, 1873
1,262	Mowing and Reaping Machine Company, W. A. Wood, Hoosick Falls, N. Y. Sections for the cutters of harvesting-machines.	Apr. 24, 1873	May 13, 1873
1,564	Moyer & Co., Philadelphia, Pa. Medical compound for rheumatism.	Nov. 18, 1873	Dec. 2, 1873
1,162	National Rubber Company, Bristol, R. I. Rubber hose and belting.	Dec. 12, 1872	Mar. 11, 1873
1,526	National Watch Company, Elgin, Ill. Watches.	Nov. 6, 1873	Nov. 11, 1873
1,547	Same.	Nov. 22, 1873	Dec. 2, 1873
1,548	Same.	Nov. 22, 1873	Dec. 2, 1873
1,549	Same.	Nov. 22, 1873	Dec. 2, 1873
1,550	Same.	Nov. 22, 1873	Dec. 2, 1873
1,551	Same.	Nov. 22, 1873	Dec. 2, 1873
1,552	Same.	Nov. 22, 1873	Dec. 2, 1873
1,553	Same.	Nov. 22, 1873	Dec. 2, 1873
1,554	Same.	Nov. 22, 1873	Dec. 2, 1873
1,555	Same.	Nov. 22, 1873	Dec. 2, 1873
1,556	Same.	Nov. 22, 1873	Dec. 2, 1873
1,557	Same.	Nov. 22, 1873	Dec. 2, 1873
1,558	Same.	Nov. 22, 1873	Dec. 2, 1873
1,559	Same.	Nov. 22, 1873	Dec. 2, 1873
1,560	Same.	Nov. 22, 1873	Dec. 2, 1873
1,561	Same.	Nov. 22, 1873	Dec. 2, 1873
1,562	Same.	Nov. 22, 1873	Dec. 2, 1873
1,575	Netterfield & Smith, Burr Oak, Mich. Burning fluids and liniments.	Oct. 31, 1873	Dec. 16, 1873
1,469	Newman, M., and B. Liebman, New York, N. Y. Clothing for women and children.	Sept. 2, 1873	Sept. 23, 1873
1,470	Newton Bros. & Co., San Francisco, Cal. Teas.	Aug. 16, 1873	Sept. 23, 1873
1,125	Newton, L. H., Brooklyn, N. Y. Packed fresh salmon.	Jan. 24, 1873	Feb. 11, 1873
1,510	New York Wire-Snap Company, New York, N. Y. Snap-hooks.	Oct. 2, 1873	Oct. 21, 1873
1,386	North, J. G., Brookline, Mass. Composition for softening, polishing, and preserving leather.	July 17, 1873	July 29, 1873
1,346	Oakford & Co., Baltimore, Md. Sugar-cured hams.	June 19, 1873	July 1, 1873
1,291	Oakley, J. & Co., New York and Newburgh, N. Y. Soap.	May 23, 1873	June 3, 1873
1,514	Ocean Trout Company, Port Monmouth, N. J. Preserved fish.	Sept. 10, 1873	Oct. 28, 1873
1,429	Ofeldt, F. W. & Co., Newark, N. J. Gas-machine.	July 19, 1873	Aug. 26, 1873
1,275	Oliver, J., South Bend, Ind. Plow.	Apr. 3, 1873	May 20, 1873
1,297	Orendorf, J. T. M., Baltimore, Md. Whisky.	May 26, 1873	June 3, 1873
1,241	Osborne, D. M., & Co., Auburn, N. Y. Harvesting-machines.	Apr. 23, 1873	Apr. 29, 1873
1,217	Osgood, J. R., & Co., Boston, Mass. Prints.	Mar. 27, 1873	Apr. 15, 1873
1,284	Pacific Balm Company, New York, N. Y. Medicine.	May 17, 1873	May 27, 1873
1,437	Palm-Oil Axle-Grease Company, Charleston, S. C. Axle-grease.	Aug. 12, 1873	Sept. 2, 1873
1,515	Pardessus, S. J., & Co., New York, N. Y. Glass shades, cylinders, and similar glass goods.	Oct. 18, 1873	Oct. 28, 1873
1,347	Parry, T. W., Lehigh Township, Northampton County, Pa. Roofing-slate.	June 11, 1873	July 1, 1873
1,341	Pevey, C. K., Worcester, Mass. Playing-cards.	June 23, 1873	July 1, 1873
1,348	Same.	June 16, 1873	July 1, 1873
1,349	Same.	June 25, 1873	July 1, 1873
1,354	Phipps, G., & Co., Cincinnati, Ohio. Sugar-cured meats and smoked beef.	June 25, 1873	July 8, 1873
1,576	Porter, D., San Francisco, Cal. Whisky.	Dec. 5, 1873	Dec. 16, 1873
1,183	Preston & Merrill, Boston, Mass. Compound of sugar and lemons.	Feb. 3, 1873	Mar. 25, 1873
1,225	Same. Yeast-powder.	Feb. 4, 1873	Apr. 22, 1873
1,135	Prince's Metallic-Paint Company, Weissport, Pa. Metallic paint.	Feb. 8, 1873	Feb. 18, 1873
1,406	Prince's Metallic-Paint Company, New York, N. Y. Metallic paint.	July 26, 1873	Aug. 12, 1873
1,192	Procter & Gamble, Cincinnati, Ohio. Candles.	Mar. 17, 1873	Apr. 1, 1873
1,226	Same. Starch.	Mar. 31, 1873	Apr. 22, 1873
1,540	Prot, F., & Co., Paris, France. Perfumery and toilet articles.	Nov. 7, 1873	Nov. 25, 1873
1,494	Queen City Wringer Company, Cincinnati, Ohio. Clothes-wringers.	Aug. 7, 1873	Oct. 14, 1873
1,499	Quicksilver Mining Company, New Almaden, Cal. Quicksilver-flasks.	Sept. 29, 1873	Oct. 14, 1873
1,269	Rand, W. J., New York, N. Y. Rice-starch.	Apr. 24, 1873	May 13, 1873
1,422	Rainey, W. H., Brunswick, Ga. Liniment.	Aug. 6, 1873	Aug. 26, 1873
1,257	Ransom, D., Son & Co., Buffalo, N. Y. Medicinal compound.	Apr. 3, 1873	May 13, 1873
1,258	Same.	Apr. 3, 1873	May 13, 1873
1,259	Same. Medical compound.	May 29, 1872	May 13, 1873
1,260	Same. Medical compound.	May 29, 1872	May 13, 1873
1,261	Same.	Apr. 3, 1873	May 13, 1873
1,193	Rattinger, R., Saint Louis, Mo. Medicines.	Feb. 19, 1873	Apr. 1, 1873
1,149	Remington, E., & Sons, Ilion, N. Y. Plows.	Feb. 18, 1873	Feb. 25, 1873
1,326	Reynard, P., Saint Louis, Mo., and Louisville, Ky. Insect-powder.	June 9, 1873	June 17, 1873
1,407	Reynolds, G. A., Utica, N. Y. Shoes.	June 30, 1873	Aug. 12, 1873
1,395	Rhodes, B. M., & Co., Baltimore, Md. Guano.	July 29, 1873	Aug. 5, 1873
1,569	Rhodes, J. M., & Co., Baltimore, Md. Ammoniated superphosphate fertilizer.	Nov. 24, 1873	Dec. 9, 1873
1,408	Rieman, W. J., & Son, Baltimore, Md. Ham, shoulders, bacon, &c.	June 12, 1873	Aug. 12, 1873
1,163	Rives, F. and J., and G. A. Bailey, Washington, D. C. Printed publications.	Mar. 3, 1873	Mar. 11, 1873
1,458	Robertson, J., & Son, Putney, Vt. Medicated Manila paper.	Aug. 23, 1873	Sept. 16, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1, 173	Robinson Tobacco Manufacturing Company, Louisville, Ky. Fine-cut chewing or smoking tobacco.	Feb. 14, 1873	Mar. 18, 1873
1, 172	Same. Smoking-tobacco.	Feb. 14, 1873	Mar. 18, 1873
1, 194	Rockwell, J. V., New York, N. Y. Ruffles and dress-trimmings.	Mar. 10, 1873	Apr. 1, 1873
1, 342	Rogers, C., & Bros., Meriden, Conn. Forks, spoons, and other table-ware.	June 25, 1873	July 1, 1873
1, 312	Rogers, H. M., & Co., New York, N. Y. Cod-liver oil.	May 31, 1873	June 10, 1873
1, 327	Rommeney, T., Williamsburgh, N. Y. Lager-beer.	May 31, 1873	June 17, 1873
1, 495	Royal Baking-Powder Company, New York, N. Y. Baking-powder.	Sept. 23, 1873	Oct. 14, 1873
1, 208	Rubber-Paint Company, Cleveland, Ohio. Rubber-paint.	Mar. 3, 1873	Apr. 8, 1873
1, 209	Same. same.	Mar. 3, 1873	Apr. 8, 1873
1, 535	Rumsey, L. M., & Co., Saint Louis, Mo. Agricultural implements.	Oct. 31, 1873	Nov. 18, 1873
1, 150	Sanger, W. P., New York, N. Y. Gin.	Feb. 15, 1873	Feb. 25, 1873
1, 242	Sawyer, H., Chelsea, Mass. Bluing.	Apr. 23, 1873	Apr. 29, 1873
1, 423	Schloemer, O., New York, N. Y. Wines and liquors.	May 23, 1873	Aug. 26, 1873
1, 424	Scruton, W., New York, N. Y. Castor-oil pills.	Aug. 9, 1873	Aug. 26, 1873
1, 164	Seaverns, T. W., jr., West Roxbury, Mass. Boots and shoes.	Mar. 3, 1873	Mar. 11, 1873
1, 227	Seidenberg & Co., New York, N. Y. Cigars.	Apr. 12, 1873	Apr. 22, 1873
1, 379	Sellers Brothers, Philadelphia, Pa. Miller's soap-stone packing.	June 7, 1873	July 22, 1873
1, 335	Shaw, C. A., Boston, Mass. Stocking supporter, clasps, and suspenders.	June 13, 1873	June 24, 1873
1, 350	Sheffield File Works, Albany, N. Y. Files, rasps, and steels.	June 24, 1873	July 1, 1873
1, 343	Sherwood & Genin, Buffalo, N. Y. Soap.	Apr. 28, 1873	July 1, 1873
1, 228	Siloam Mineral-Spring Company. Mineral-water.	Mar. 20, 1873	Apr. 22, 1873
1, 397	Silver Lake Company, Newtonville, Mass. Steam-packing for engines.	July 29, 1873	Aug. 5, 1873
1, 398	Same. same.	July 29, 1873	Aug. 5, 1873
1, 399	Same. same.	July 29, 1873	Aug. 5, 1873
1, 400	Same. Solid-braid d cords.	July 29, 1873	Aug. 5, 1873
1, 355	Sleeper, Wells & Aldrich, Burlington, N. J. Preserved, canned, or bottled vegetables, fruits, pickles, sauces, and honey.	June 12, 1873	July 8, 1873
1, 541	Slingerland, T. B., Rome, N. Y. Cigars.	Nov. 15, 1873	Nov. 25, 1873
1, 240	Smith & Montross, Galien, Mich. Rake and other handles.	Apr. 5, 1873	Apr. 29, 1873
1, 369	Smith & Parks, Cincinnati, Ohio. Globules for homeopathic medicines.	July 5, 1873	July 15, 1873
1, 463	Smith, M. M., & Bro., Chicago, Ill. Distilled liquors.	Sept. 17, 1873	Oct. 7, 1873
1, 484	Same. same.	Sept. 17, 1873	Oct. 7, 1873
1, 485	Same. same.	Sept. 17, 1873	Oct. 7, 1873
1, 486	Same. same.	Sept. 17, 1873	Oct. 7, 1873
1, 449	Smyth & Co., Balbriggan, Ireland. Hosiery.	Sept. 2, 1873	Sept. 9, 1873
1, 411	Solomons, M. J., Savannah, Ga. Fertilizers.	July 19, 1873	Aug. 19, 1873
1, 370	Southard, Robinson & Co., New York, N. Y. Cylinder-stoves.	June 28, 1873	July 15, 1873
1, 496	Spear, J., & Co., Philadelphia, Pa. Stoves.	Oct. 15, 1873	Oct. 14, 1873
1, 360	Stark Mills, Manchester, N. H. Rough bathing-towels.	May 21, 1873	July 8, 1873
1, 306	Steele & Price, Chicago, Ill. Flavoring extracts, &c.	Apr. 8, 1873	June 10, 1873
1, 154	Sternberger, L., Philadelphia, Pa. Shirts, shirt-fronts, &c.	July 15, 1873	Mar. 4, 1873
1, 459	Stewart, W. S., Saint Louis, Mo. Barrels of whisky.	Aug. 30, 1873	Sept. 16, 1873
1, 276	Stone & Spencer, Syracuse, N. Y. Salt.	Apr. 30, 1873	May 20, 1873
1, 155	Stone, J. W., Lynchburgh, Va. Manufactured tobacco.	Feb. 24, 1873	Mar. 4, 1873
1, 159	Same. Smoking-tobacco.	Feb. 27, 1873	Mar. 4, 1873
1, 151	Stoner, M. H., Skaneateles, N. Y. Pile-remedy.	Feb. 18, 1873	Feb. 25, 1873
1, 298	Stowe, S. F., Providence, R. I. Beverage.	May 26, 1873	June 3, 1873
1, 391	Same. Small or root beer.	July 14, 1873	July 29, 1873
1, 387	Straight, S., & Son, Hudson, Ohio. Butter.	July 19, 1873	July 29, 1873
1, 497	Straub, I., & Co., Cincinnati, Ohio. Grinding-mills.	Aug. 7, 1873	Oct. 14, 1873
1, 230	Straub Mill Company, Cincinnati, Ohio. Grinding-mills.	Mar. 19, 1873	Apr. 22, 1873
1, 120	Suire, F. E., & Co., Cincinnati, Ohio. Gin.	Jan. 30, 1873	Feb. 4, 1873
1, 121	Same. same.	Jan. 30, 1873	Feb. 4, 1873
1, 122	Same. same.	Jan. 30, 1873	Feb. 4, 1873
1, 231	Sussfield, Lorsch & Co., New York, N. Y. Opera-glasses, field-glasses, and other telescopes.	Apr. 18, 1873	Apr. 22, 1873
1, 380	Sweet, Barnes & Co., Syracuse, N. Y. Steel and iron wares.	May 24, 1873	July 22, 1873
1, 114	Thomson, Langdon & Co., New York, N. Y. Corsets.	Jan. 23, 1873	Jan. 28, 1873
1, 277	Same. Toilet and other brushes.	May 9, 1873	May 20, 1873
1, 438	Thum, C. C., Philadelphia, Pa. Varnish and other brushes.	Aug. 15, 1873	Sept. 2, 1873
1, 156	Tilden, H. A., New Lebanon, N. Y. Medicinal compound.	Feb. 21, 1873	Mar. 4, 1873
1, 359	Tomey & Sons, Perth, Scotland. Water-gages for steam-boilers.	July 5, 1873	July 8, 1873
1, 195	Tomlinson, D. D., San José, Cal. Medicine.	Mar. 29, 1873	Apr. 1, 1873
1, 366	Tompkins, S. E., & Co., Sing Sing, N. Y. Saddle-trees.	May 17, 1873	July 15, 1873
1, 589	Tompkins, S. E., Sing Sing, N. Y. Saddle-trees.	Dec. 20, 1873	Dec. 30, 1873
1, 210	Townsend & Co., New York, N. Y. Lozenges and sirup.	Feb. 15, 1873	Apr. 8, 1873
1, 351	Tracy, R. A., Brooklyn, N. Y. Preparation for toothache.	June 24, 1873	July 1, 1873
1, 106	Tripp, J. C., Fairhaven, Mass., assignor to Boston and Fairhaven Iron Works. Printing-presses, &c.	Jan. 13, 1873	Jan. 21, 1873
1, 487	Troxell, W. L., Brooklyn, N. Y. Soap.	Sept. 24, 1873	Oct. 7, 1873
1, 313	Tubbs, E. M., & Co., Manchester, N. Y. Medical compound.	May 31, 1873	June 10, 1873
1, 519	Tuttle, J. W., Watertown, Mass. Knit scarfs or tippets.	Oct. 31, 1873	Nov. 4, 1873
1, 518	Union Stove and Manufacturing Company, Pittston, Pa. Stoves.	Sept. 27, 1873	Nov. 4, 1873
1, 382	Utica Steam-Gage Company. Steam-gages and engine-room fixtures generally.	July 12, 1873	July 22, 1873
1, 563	Vallier, L., New York, N. Y. Liniment.	Nov. 17, 1873	Dec. 2, 1873
1, 477	Van Riper, H., and J. G. Beach, New York, N. Y. Fever and ague cure.	Sept. 13, 1873	Sept. 30, 1873
1, 584	Van Skelline, T., Brooklyn, N. Y. Motto-papers.	Dec. 13, 1873	Dec. 23, 1873
1, 409	Vergnole, M., New Orleans, La. Medicated liquor.	Apr. 14, 1873	Aug. 12, 1873
1, 500	Wade, H. M., Philadelphia, Pa. Window and mirror polish.	Sept. 29, 1873	Oct. 14, 1873
1, 285	Wadsworth Brothers & Co., New York, N. Y. White zinc-paint.	May 17, 1873	May 27, 1873
1, 250	Walker, McGraw & Co., Detroit, Mich. Chewing-tobacco.	Apr. 24, 1873	May 6, 1873
1, 136	Same. Fine-cut chewing-tobacco.	Feb. 10, 1873	Feb. 18, 1873
1, 388	Wall, Belvin & Day, Saint Louis, Mo. Chewing-tobacco.	July 21, 1873	July 29, 1873
1, 292	Walsh, Brooks & Kellogg, Cincinnati, Ohio, and Covington, Ky. Whisky.	May 27, 1873	June 3, 1873
1, 293	Same. same.	May 27, 1873	June 3, 1873
1, 294	Same. same.	May 27, 1873	June 3, 1873
1, 165	Warder & Cooper, Valley Junction, Ohio. Maizola, (a product of corn).	Mar. 3, 1873	Mar. 11, 1873
1, 336	Webb, H. P., New York, N. Y. Paint.	June 7, 1873	June 24, 1873
1, 480	Webb, Turner & Co., New York, N. Y. Cheese.	Sept. 20, 1873	Sept. 30, 1873
1, 471	Weiss, Eller & Kaepfel, New York, N. Y. Leaf-tobacco.	Sept. 13, 1873	Sept. 23, 1873
1, 472	Same. same.	Sept. 13, 1873	Sept. 23, 1873
1, 585	Wells, Richardson & Co., Burlington, Vt. Aniline-dyes.	Dec. 15, 1873	Dec. 23, 1873
1, 577	Wenck, G. J., New York, N. Y. Perfumes, medicines, &c.	Nov. 22, 1873	Dec. 16, 1873
1, 412	Wentz & Barndollar, Baltimore, Md. Packed oysters, fruits, and vegetables.	July 12, 1873	Aug. 19, 1873
1, 334	Wenzell, W. T., San Francisco, Cal. Cosmetic.	May 9, 1873	June 24, 1873
1, 520	West, C., & Sons, Baltimore, Md. Refined petroleum.	Oct. 21, 1873	Nov. 4, 1873
1, 521	Wheelwright, S. T., and C. L. Locke, Buffalo, N. Y. Toy-wheels.	Sept. 27, 1873	Nov. 4, 1873
1, 184	White, S. S., Philadelphia, Pa. Gold-foil.	Mar. 15, 1873	Mar. 25, 1873

List of trade-marks registered during the year 1873—Continued.

No.	Name, residence, and title.	Date of filing.	Date of registration.
1, 127	Whiteley, Fassler & Kelly, Springfield, Ohio. Harvesting-machines	Feb. 1, 1873	Feb. 11, 1873
1, 128	Same.....Self-rakes, droppers, reels, &c., of harvesters.....	Feb. 1, 1873	Feb. 11, 1873
1, 129	Same.....Guard-fingers, knife-sections, &c., of harvesters.....	Feb. 1, 1873	Feb. 11, 1873
1, 339	Whitman, J. A., Cranston, R. I. Fountain-pump.....	July 8, 1872	June 24, 1873
1, 152	Williams, D., New York, N. Y. Printed publications.....	Feb. 15, 1873	Feb. 25, 1873
1, 185	Williams, J. B., & Co., Glastenbury, Conn. Soap.....	Mar. 19, 1873	Mar. 25, 1873
1, 186	Same.....same.....	Mar. 19, 1873	Mar. 25, 1873
1, 392	Wilson Carbulated Cod-Liver-Oil Company, New York, N. Y. Proprietary medicinal preparations.	July 10, 1873	July 29, 1873
1, 295	Winall, A. W., Cincinnati, Ohio. Grinding-mills.....	May 20, 1873	June 3, 1873
1, 396	Wittichen, O., Haymarket, Va. Agricultural fertilizers	July 29, 1873	Aug. 5, 1873
1, 243	Wood, A. H., Boston, Mass. Gas-burners	Apr. 2, 1873	Apr. 29, 1873
1, 196	Woodbury, F. P., New York, N. Y. Hams and shoulders of pork.....	Feb. 27, 1873	Apr. 1, 1873
1, 197	Same.....same.....	Feb. 27, 1873	Apr. 1, 1873
1, 198	Same.....same.....	Feb. 27, 1873	Apr. 1, 1873
1, 544	Woods, G., & Co., Cambridgeport, Mass. Organs.....	July 25, 1873	Nov. 25, 1873
1, 441	Wright, J. A., & Co., Keene, N. H. Cleaning-powder.....	June 18, 1873	Sept. 2, 1873
1, 296	Zimmerman, C. C., Shoemakersville, Pa. Medicine	May 6, 1873	June 3, 1873

ALPHABETICAL LIST OF INVENTIONS.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Specification.	Drawing.	Volume.	Page.
A.							
Abdominal supporter.....	J. W. Gurley.....	141, 137	July 22, 1873	730	242	4	96
Abdominal supporter.....	E. J. Harding.....	140, 778	July 15, 1873	389	134	4	59
Abdominal supporter.....	M. M. Merrill.....	140, 585	July 8, 1873	223	75	4	38
Accordion, &c.....	F. Goetze and D. Müller.....	144, 025	Oct. 28, 1873	606	201	4	458
Acid and other vessels, Cap to prevent the bursting of carbonic.	J. Matthews.....	138, 171	Apr. 22, 1873	818	260	3	457
Acid generator, fountain, and other vessels, Carbonic.	J. Matthews.....	138, 908	May 13, 1873	398	.....	3	540
Acid, Manufacture of boracic.....	F. Gutzkow.....	137, 072	Mar. 25, 1873	658	218	3	328
Acid, Manufacture of sulphuric.....	J. Saunders.....	144, 928	Nov. 25, 1873	661	224	4	566
Acid, Manufacture of sulphuric.....	E. Thomson and W. H. Greene.....	143, 202	Sept. 23, 1873	765	264	4	337
Adding-machine.....	G. Linderoos.....	140, 146	June 24, 1873	665	209	3	694
Adding-machine.....	S. Pool.....	143, 184	Sept. 23, 1873	749	259	4	336
Adding-machine.....	A. M. Stephenson.....	137, 107	Mar. 25, 1873	688	229	3	330
Adjustable-bit.....	F. Jonas.....	137, 373	Apr. 1, 1873	85	28	3	364
Adjustable-bracket.....	J. B. Morrison.....	142, 263	Aug. 26, 1873	787	260	4	226
Addressing-machine.....	F. A. Darling.....	137, 599	Apr. 8, 1873	296	91	3	392
Addressing-machine.....	S. Holton.....	136, 323	Feb. 25, 1873	859	276	3	232
Advertising-balloon.....	W. F. Browne.....	144, 436	Nov. 11, 1873	232	78	4	509
Advertising-box to post, Clamp for securing.....	P. McCosker.....	143, 365	Sept. 30, 1873	921	312	4	365
Advertising-lamp.....	F. R. Warner.....	141, 971	Aug. 19, 1873	515	170	4	194
Advertising-lantern.....	S. Kuh.....	141, 719	Aug. 12, 1873	282	92	4	166
Aerated liquids, Draught-pipe for.....	O. F. Stedman.....	134, 710	Jan. 7, 1873	198	64	3	22
Ageing and the production of vinegar, Apparatus for treating alcoholic liquids in spray with ozone for.	R. D. Turner.....	136, 470	Mar. 4, 1873	102	34	3	254
Ageing wine and liquor.....	A. Luquet.....	136, 741	Mar. 11, 1873	354	117	3	283
Agricultural boiler.....	C. M. Cloud.....	142, 326	Sept. 2, 1873	5	2	4	242
Agricultural boiler.....	H. A. Mears.....	140, 213	June 24, 1873	721	227	3	698
Agricultural boiler.....	H. A. Mears.....	145, 517	Dec. 16, 1873	441	144	4	645
Agricultural implements, Blade for.....	W. Scott.....	146, 026	Dec. 30, 1873	913	296	4	706
Air and gas engine.....	O. Trossin.....	141, 189	July 22, 1873	785	257	4	100
Air-brake, Locomotive.....	G. Westinghouse, jr.....	144, 005	Oct. 28, 1873	589	195	4	456
Air-brake, Steam-power.....	H. L. McAvoy.....	138, 339	Apr. 29, 1873	999	314	3	480
Air-compressing apparatus.....	J. Ericsson.....	146, 055	Dec. 30, 1873	939	303	4	708
Air-compressing apparatus.....	R. S. Pardee.....	143, 634	Oct. 14, 1873	217	73	4	407
Air-compressing apparatus, Hydraulic.....	C. Moore.....	140, 524	July 1, 1873	156	53	4	21
Air-compressor.....	H. H. Day.....	144, 390	Nov. 11, 1873	193	66	4	506
Air-compressor.....	H. P. Fairfield.....	142, 452	Sept. 2, 1873	116	37	4	252
Air compressor or blower.....	L. Chase.....	141, 762	Aug. 12, 1873	321	105	4	169
Air compressor or blower.....	L. Chase.....	143, 329	Sept. 30, 1873	882	{ 301 } 302	4	363
Air-cooling apparatus.....	T. D. Kingan.....	140, 375	July 1, 1873	34	11	4	11
Air-cooling apparatus.....	P. Nezeriaux.....	136, 753	Mar. 11, 1873	363	120	3	283
Air-engine.....	H. Norman and C. F. Dietrich.....	136, 259	Feb. 25, 1873	802	260	3	228
Air for use in the arts, Heating.....	J. A. Morrell.....	142, 497	Sept. 2, 1873	160	.....	4	254
Air heating-apparatus, Compressed.....	H. Bushnell.....	140, 466	July 1, 1873	104	35	4	17
Air-heating furnace.....	J. M. Wilson.....	142, 363	Sept. 2, 1873	37	13	4	245
Air-motor, Compressed.....	H. Bushnell.....	137, 889	Apr. 15, 1873	557	175	3	427
Air-navigating apparatus.....	T. Green.....	141, 785	Aug. 12, 1873	344	{ 113 } 114	4	171
Air-spring, Automatic vent-opener for.....	J. Walther.....	139, 346	May 27, 1873	809	258	3	594
Air-stick for defense, Compressed.....	P. Giffard.....	136, 316	Feb. 25, 1873	854	275	3	232
Alarm: See Blast-furnace alarm. Burglar-alarm. Fire-alarm. Fog-alarm. Letter-box alarm. Low-water alarm. Milk-boiler alarm. Overflow-alarm. Till-alarm.							
Alkali, Encasing caustic.....	G. W. Humphrey.....	137, 137	Mar. 25, 1873	714	237	3	332
Alkaline carbonates, Manufacture of.....	H. De Grouilliers.....	143, 755	Oct. 21, 1873	352	.....	4	427
Alkaline solutions, &c., Furnace for evaporating.....	M. L. Keen.....	144, 682	Nov. 18, 1873	446	{ 150 } 151	4	537
Alkaline solutions from treating straw, Re-using.....	J. H. Dugan.....	145, 409	Dec. 9, 1873	333	112	4	624
Alloy.....	H. W. Wright.....	141, 529	Aug. 5, 1873	103	.....	4	143
Alloy for producing ornamental coatings on metal.....	H. Aiken.....	137, 279	Apr. 1, 1873	1	.....	3	357
Alloying gold and silver, Manufacture of copper-ingots for.	J. Feix.....	144, 896	Nov. 25, 1873	635	.....	4	563
Alloy of nickel, zinc and copper.....	H. W. Wright.....	141, 530	Aug. 5, 1873	104	.....	4	143
Alloys to resemble silver.....	A. E. P. Bandvin.....	142, 760	Sept. 16, 1873	402	.....	4	297
Alloys, Coating iron, &c., with protecting.....	C. Marshall.....	144, 403	Nov. 11, 1873	203	.....	4	506
Alphabet-block.....	E. H. Muldaur.....	140, 722	July 8, 1873	337	114	4	47
Aluminum.....	J. A. Jeancon.....	140, 924	July 15, 1873	523	.....	4	70
Amalgamating gold and silver, Process of.....	J. Tunbridge.....	145, 603	Dec. 16, 1873	513	168	4	651
Amalgamating-pan.....	I. S. Parke.....	143, 635	Oct. 14, 1873	218	73	4	407
Amalgamator.....	F. Morris.....	137, 088	Mar. 18, 1873	673	223	3	329
Ammoniacal gas-engine.....	W. H. Smith and F. V. De Coppet.....	141, 242	July 29, 1873	846	276	4	113

Alphabetical list of inventions—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	D'rg.	Vol.	Page.
Anchor.....	C. A. Chamberlin.....	142,769	Sept. 16, 1873	409	138	4	297
Anchor.....	Z. Hall.....	144,901	Nov. 25, 1873	638	217	4	564
Anchor.....	W. W. Smith.....	135,450	Feb. 4, 1873	55	18	3	132
Anemometer, Electrical.....	F. S. Baldwin.....	140,340	July 1, 1873	4	2	4	8
Angle-iron cutter.....	A. McGuffin.....	145,437	Dec. 9, 1873	356	119	4	626
Angling-fly.....	J. Mullaly.....	139,180	May 20, 1873	655	205	3	574
Angling-reel.....	C. L. Nee.....	135,283	Jan. 28, 1873	740	238	3	107
Animal and insect trap.....	W. W. Hannah.....	141,346	July 29, 1873	947	308	4	121
Animal cage-trap.....	S. W. Rice.....	137,864	Apr. 15, 1873	538	167	3	425
Animal-carasses, Apparatus for depilating.....	D. H. Sherman.....	144,150	Oct. 28, 1873	707	235	4	466
Animal-carasses, Machine for scraping.....	R. C. Tompkins.....	144,579	Nov. 11, 1873	351	119	4	518
Animal-matter, Apparatus for treating and drying.....	W. C. Marshall.....	137,699	Apr. 8, 1873	383	119	3	400
Animal-matter, Drying and disintegrating.....	C. C. Coe.....	141,853	Aug. 19, 1873	411	.....	4	186
Animal-power, Endless chain for.....	G. N. Palmer.....	139,604	June 3, 1873	139	45	3	620
Animal-shearing apparatus.....	C. A. J. Lengelée.....	137,220	Mar. 25, 1873	791	261	3	338
Animal-trap.....	H. H. C. Arnold.....	145,082	Dec. 2, 1873	42	13	4	589
Animal-trap.....	E. A. C. Da Silva.....	135,732	Feb. 11, 1873	321	102	3	165
Animal-trap.....	S. F. Estell.....	135,534	Feb. 4, 1873	129	41	3	137
Animal-trap.....	F. Flora.....	135,268	Jan. 28, 1873	727	233	3	106
Animal-trap.....	J. Gould.....	139,572	June 3, 1873	110	37	3	618
Animal-trap.....	J. W. Greene.....	134,539	Jan. 7, 1873	34	11	3	10
Animal-trap.....	J. H. Hair.....	140,036	June 17, 1873	549	173	3	676
Animal-trap.....	J. Krummenauer.....	136,378	Mar. 4, 1873	25	8	3	247
Animal-trap.....	W. S. Lawrence.....	135,134	Jan. 21, 1873	587	190	3	82
Animal-trap.....	D. A. Leach.....	143,169	Sept. 23, 1873	738	254	4	335
Animal-trap.....	A. M. Lovett.....	136,842	Mar. 18, 1873	449	149	3	300
Animal-trap.....	H. J. Matthews.....	139,800	June 10, 1873	339	105	3	652
Animal-trap.....	R. B. May.....	136,330	Feb. 25, 1873	866	278	3	233
Animal-trap.....	J. Merchen.....	139,967	June 17, 1873	487	154	3	671
Animal-trap.....	G. A. Norman.....	139,182	May 20, 1873	656	205	3	574
Animal-trap.....	D. J. Owen.....	138,275	Apr. 29, 1873	942	297	3	475
Animal-trap.....	B. F. Smith.....	143,727	Oct. 14, 1873	309	102	4	413
Animal-trap.....	J. M. Wilkinson.....	142,362	Sept. 2, 1873	36	13	4	245
Animal-trap and seed-safe combined.....	S. V. Greer.....	140,773	July 15, 1873	384	132	4	59
Animals, Instrument for administering balls to.....	T. H. Bex.....	139,856	June 17, 1873	392	123	3	663
Animals, Stock for shoeing.....	J. Ditch.....	144,963	Nov. 25, 1873	689	233	4	568
Ankle supporter and filler.....	S. Silberschmidt.....	143,537	Oct. 7, 1873	120	41	4	390
Annealing Bessemer steel.....	G. W. Billings.....	140,759	July 15, 1873	373	128	4	58
Annunciator.....	C. H. Greenleaf.....	141,927	Aug. 19, 1873	481	159	4	191
Annunciator, Electric.....	G. W. Shawk.....	139,826	June 10, 1873	362	112	3	654
Annunciator, Electric.....	A. Storer.....	141,898	Aug. 19, 1873	459	149	4	189
Annunciator, Electric hotel.....	W. W. Foote.....	140,129	June 24, 1873	650	204	3	693
Annunciator, Electric vote.....	T. B. Doolittle.....	143,679	Oct. 14, 1873	259	86	4	410
Annunciator, Electro-magnetic.....	W. Humans.....	136,518	Mar. 4, 1873	149	48	3	257
Annunciator, Electro-magnetic.....	G. W. Shawk and A. Storer.....	136,465	Mar. 4, 1873	97	33	3	253
Annunciator, Speaking-tube.....	D. Rousseau.....	139,818	June 10, 1873	354	110	3	653
Ant-destroying process.....	J. J. Dulany and H. Dreyer.....	144,075	Oct. 28, 1873	648	.....	4	461
Ant-trap.....	T. G. Ames.....	137,336	Apr. 1, 1873	56	17	3	361
Ant-trap.....	L. Rubarth.....	140,954	July 15, 1873	552	185	4	72
Apple-butter stirrer.....	G. W. Collins.....	142,208	Aug. 26, 1873	744	245	4	222
Arithmetical frame.....	E. T. Curtis.....	142,151	Aug. 26, 1873	695	229	4	218
Ash-leach.....	J. W. Kernodle and A. H. Haun.....	139,963	June 17, 1873	483	152	3	671
Ash-screener and commode.....	J. C. Morrell.....	136,609	Mar. 11, 1873	242	82	3	274
Asphalt-pipes, Manufacture of.....	A. Müller.....	143,922	Oct. 21, 1873	491	165 166	4	438
Asphalt, Treating.....	P. Barthel.....	135,879	Feb. 18, 1873	468	150	3	190
Atmosphere, Apparatus for moistening the.....	J. G. Garland.....	140,410	July 1, 1873	59	21	4	13
Atomizer-bulb.....	H. D. Lockwood.....	138,416	Apr. 29, 1873	1,064	335	3	485
Atomizer or vaporizer.....	J. N. Gerard.....	143,070	Sept. 23, 1873	664	228	4	328
Auger-bit, Machine for forming.....	J. Swan.....	141,401	July 29, 1873	999	324	4	124
Auger, Earth.....	G. H. Baisley and G. Wilson.....	140,756	July 15, 1873	371	127	4	58
Auger, Earth.....	W. H. Beach and C. N. Hanson.....	135,509	Feb. 4, 1873	104	33	3	136
Auger, Earth.....	E. H. Clark.....	143,963	Oct. 28, 1873	549	182	4	453
Auger, Earth.....	W. Cole.....	144,510	Nov. 11, 1873	290	98	4	514
Auger, Earth.....	G. G. Collins and J. A. Morrison.....	134,734	Jan. 14, 1873	230	74	3	39
Auger, Earth.....	W. T. Cooley.....	143,276	Sept. 30, 1873	836	288	4	359
Auger, Earth.....	S. Emery.....	142,218	Aug. 26, 1873	751	248	4	223
Auger, Earth.....	C. D. Pierce.....	141,664	Aug. 12, 1873	239	75	4	162
Auger, Earth.....	W. H. Salyer.....	141,892	Aug. 19, 1873	454	148	4	189
Auger, Earth.....	J. B. Smith.....	136,555	Mar. 4, 1873	183	59	3	260
Auger, Earth.....	A. Long and S. C. Bollman.....	140,226	June 24, 1873	730	230	3	699
Auger, Earth.....	H. C. Stouffer.....	137,036	Mar. 18, 1873	613	203	3	313
Auger, Earth.....	I. M. West.....	137,744	Apr. 8, 1873	428	132	3	403
Auger-handle.....	S. W. Hemenway.....	139,006	May 20, 1873	494	156	3	561
Auger-handle.....	F. B. Pease.....	142,410	Sept. 2, 1873	78	26	4	248
Auger, Hollow.....	G. F. Almy.....	141,745	Aug. 12, 1873	304	99	4	168
Auger, Hollow.....	C. W. Corr.....	136,138	Feb. 25, 1873	706	228	3	220
Auger, Hollow.....	O. A. Essig.....	138,623	May 6, 1873	136	44	3	509
Auger, Hollow.....	E. W. Faucett, E. W. Silver, and J. Deming.....	143,132	Sept. 23, 1873	711	244	4	332
Auger, Ice.....	W. A. Clark.....	139,769	June 10, 1873	312	97	3	650
Auger, Machine for forming the lip of.....	J. Swan.....	139,091	May 20, 1873	570	179	3	567
Auger, Means for operating earth.....	W. H. Beach and C. N. Hanson.....	135,510	Feb. 4, 1873	105	33,34	3	136
Auger, Means for operating earth.....	J. B. Christian.....	138,788	May 13, 1873	297	91	3	532
Auger-shafts, Coupling for earth.....	G. W. Irwin and T. A. Cox.....	140,710	July 8, 1873	327	111	4	46
Auger, Undermining.....	P. Sheldon.....	143,535	Oct. 7, 1873	118	40	4	390
Auger, Well.....	W. L. Payne.....	143,181	Sept. 23, 1873	747	258	4	335
Augers, Die for manufacturing.....	S. A. Smith.....	136,391	Mar. 4, 1873	34	13	3	248
Augers, Shaft-coupling for earth.....	T. Urie.....	139,092	May 20, 1873	571	179	3	567
Automatic gate.....	G. C. Crum.....	140,479	July 1, 1873	115	39	4	17
Automatic gate.....	L. Filson.....	138,238	Apr. 29, 1873	903	285	3	472
Automatic gate.....	J. S. Foit.....	141,925	Aug. 19, 1873	480	158	4	191
Automatic gate.....	C. E. Gillespie.....	139,712	June 10, 1873	256	80	3	645
Automatic gate.....	N. Long.....	138,033	Apr. 22, 1873	703	222	3	448

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Automatic gate.....	J. P. Ponce.....	138, 283	Apr. 29, 1873	948	299	3	476
Automatic gate.....	G. B. Stevenson.....	137, 971	Apr. 15, 1873	628	198	3	432
Automatic gate.....	J. E. Stong.....	141, 900	Aug. 19, 1873	460	150	4	189
Automatic gate.....	E. P. Wheeler.....	143, 551	Oct. 7, 1873	139	46	4	391
Automatic gate.....	W. I. Wooster.....	136, 892	Mar. 18, 1873	491	162	3	303
Auxiliary table.....	E. Johnson.....	138, 406	Apr. 29, 1873	1, 053	332	3	484
Awning.....	J. Boyle.....	135, 966	Feb. 18, 1873	535	177	3	195
Awning.....	G. W. Gerau.....	137, 772	Apr. 15, 1873	461	144	3	419
Awning.....	H. Sykes.....	143, 542	Oct. 7, 1873	124	42	4	391
Awning frame.....	H. Stevens.....	142, 291	Aug. 26, 1873	810	268	4	228
Awning frame, Window.....	J. A. Allen.....	138, 223	Apr. 29, 1873	891	281	3	471
Awning, Street-car.....	C. B. Turnbull.....	140, 972	July 15, 1873	172	192	4	74
Awning, Painting striped.....	C. E. Wheeler.....	138, 773	May 13, 1873	283	88	3	530
Axle:							
<i>See</i> Car-axle.							
Carriage-axle.							
Vehicle-axle.							
Axle-blank, Tool for finishing.....	H. E. Forrest.....	134, 742	Jan. 14, 1873	235	76	3	39
Axle-box, Alarm and lubricating device for car.....	O. Evans.....	135, 213	Jan. 28, 1873	676	218	3	102
Axle-box and sleeve for vehicle-wheel.....	W. H. Cowell.....	141, 699	Aug. 12, 1873	267	86	4	164
Axle-box and spindle.....	J. Bower.....	134, 725	Jan. 14, 1873	223	71	3	38
Axle-box, Attachment to car.....	D. A. Hopkins.....	139, 791	June 10, 1873	331	103	3	651
Axle-box, Car.....	J. E. Bering.....	145, 146	Dec. 2, 1873	100	33	4	593
Axle-box, Car.....	W. W. Crane.....	138, 794	May 13, 1873	303	93	3	532
Axle-box, Car.....	J. M. Dodge.....	136, 424	Mar. 4, 1873	60	21	3	250
Axle-box, Car.....	H. G. Downs.....	134, 594	Jan. 7, 1873	89	28	3	14
Axle-box, Car.....	C. T. Fay.....	135, 977	Feb. 18, 1873	544	180	3	196
Axle-box, Car.....	S. F. Gates.....	138, 242	Apr. 29, 1873	906	286	3	473
Axle-box, Car.....	H. H. Hill and G. M. Sargent.....	141, 350	July 29, 1873	951	809	4	121
Axle-box, Car.....	J. Hogan.....	142, 104	Aug. 26, 1873	659	216	4	215
Axle-box, Car.....	W. B. Howe.....	143, 763	Oct. 21, 1873	357	119	4	427
Axle-box, Car.....	J. G. Johnson.....	145, 425	Dec. 9, 1873	347	116	4	625
Axle-box, Car.....	J. Kinzer.....	135, 343	Jan. 28, 1873	794	257	3	111
Axle-box, Car.....	W. J. Manker.....	135, 265	Apr. 29, 1873	932	294	3	474
Axle-box, Car.....	H. E. Marchand.....	139, 322	May 27, 1873	792	252	3	593
Axle-box, Car.....	W. J. L. Moulton.....	145, 227	Dec. 2, 1873	171	59	4	599
Axle-box, Car.....	D. Muzzey.....	145, 004	Nov. 25, 1873	724	244	4	571
Axle-box, Car.....	L. Schulze.....	143, 592	Oct. 14, 1873	180	61	4	404
Axle-box, Car.....	J. E. Uhl.....	138, 717	May 6, 1873	224	70	3	515
Axle-box, Car.....	S. Ustick.....	142, 303	Aug. 26, 1873	820	272	4	228
Axle-box, Car.....	S. Ustick.....	136, 472	Mar. 4, 1873	104	35	3	254
Axle-box, Car.....	S. Ustick.....	142, 302	Aug. 26, 1873	819	271	4	228
Axle-box, Car.....	W. W. Whitaker.....	142, 752	Sept. 9, 1873	384	129	4	284
Axle-box, Car.....	J. Whitaker and S. S. Cook.....	146, 116	Dec. 30, 1873	995	321	4	712
Axle-box, Carriage.....	J. Jones and J. and J. Dunkerley.....	138, 091	Apr. 22, 1873	754	239	3	452
Axle-box cover, Railway.....	E. Moyell and J. Howell.....	139, 179	May 20, 1873	655	204	3	574
Axle-box, Gage for setting.....	T. Scott.....	138, 347	Apr. 29, 1873	1, 006	316	3	480
Axle-box, Manufacture of carriage.....	W. J. Parmelee.....	137, 475	Apr. 1, 1873	177	56	3	371
Axle-box, Railway-car.....	R. Brewer.....	139, 655	June 10, 1873	198	65	3	641
Axle-box, Railway-car.....	C. W. Harvey.....	134, 801	Jan. 14, 1873	284	92	3	43
Axle-box, Vehicle.....	C. H. Allen.....	143, 950	Oct. 28, 1873	539	179	4	452
Axle-box, Vehicle.....	W. A. Clark.....	142, 556	Sept. 9, 1873	218	71	4	271
Axle-box, Vehicle.....	O. P. Rice.....	143, 300	Sept. 30, 1873	858	294	4	361
Axle-box, Vehicle.....	J. P. Smith.....	136, 778	Mar. 11, 1873	383	126	3	285
Axle-clip, mode of making.....	H. M. Beecher.....	141, 625	Aug. 12, 1873	205	65	4	160
Axle-iron, Carriage.....	S. J. Dennis.....	138, 795	May 13, 1873	304	94	3	532
Axle lubricator, Car.....	J. E. Bering.....	145, 834	Dec. 23, 1873	719	236	4	680
Axle lubricator, Car.....	G. A. Brannan.....	135, 517	Feb. 4, 1873	110	35	3	136
Axle lubricator, Car.....	W. J. L. Moulton.....	145, 226	Dec. 2, 1873	170	58	4	599
Axle lubricator, Car.....	T. R. Timby.....	135, 386	Jan. 28, 1873	832	268	3	114
Axle lubricator, Carriage.....	H. F. Phillips.....	137, 479	Apr. 1, 1873	180	57	3	372
Axle lubricator, Vehicle.....	C. C. Parker.....	145, 231	Dec. 2, 1873	174	60	4	599
Axle lubricator, Wagon.....	W. Loewenstein.....	138, 263	Apr. 29, 1873	929	293	3	474
Axle-turning machine.....	A. F. Moore.....	137, 316	Apr. 1, 1873	34	11	3	360
B.							
Baby-chair.....	P. Henrichs.....	134, 668	Jan. 7, 1873	161	53	3	19
Baby-jumper.....	A. F. Spooner.....	138, 209	Apr. 22, 1873	855	271	3	460
Baby-walker.....	J. Erickson.....	141, 431	Aug. 5, 1873	19	5	4	136
Back-band hook.....	J. Straus.....	139, 524	June 3, 1873	68	23	3	614
Bag:							
<i>See</i> Broom-bag.							
Dashboard-bag.							
Grain-bag.							
Horse nose-bag.							
Mail-bag.							
Paper bag.							
Traveling-bag.							
Bag-fastener.....	S. R. Bush.....	144, 738	Nov. 18, 1873	491	166	4	541
Bag-holder.....	J. B. Brown.....	134, 637	Jan. 7, 1873	130	42	3	17
Bag-holder.....	N. A. Geisinger.....	143, 897	Oct. 21, 1873	472	158	4	437
Bag-holder.....	J. Hunter and H. M. Clayton.....	138, 752	May 13, 1873	267	82	3	529
Bag-holder.....	G. W. Striker.....	143, 194	Sept. 23, 1873	760	262	4	337
Bag-holder.....	C. H. Thomas.....	141, 186	July 22, 1873	783	256	4	100
Bag-lock.....	H. Ahrend.....	139, 526	June 3, 1873	70	24	3	614
Bag-machine.....	N. Riedinger.....	140, 342	July 1, 1873	7	2	4	8
Bag-tie.....	J. Bannih and S. H. Rhodes.....	136, 637	Mar. 11, 1873	268	90	3	276
Bag-turning machine.....	J. Martin.....	136, 926	Mar. 18, 1873	518	171	3	305
Bake-pan.....	W. B. Chamberlin.....	142, 144	Aug. 26, 1873	691	227	4	218
Bake-pan.....	J. G. Metsker.....	142, 928	Sept. 16, 1873	536	183	4	308
Baker, Folding camp.....	F. Lehn.....	143, 288	Sept. 30, 1873	845	291	4	360
Baking-mold.....	G. Wingate.....	144, 939	Nov. 25, 1873	669	227	7	567
Baking-pan.....	C. T. Smith.....	144, 417	Nov. 11, 1873	219	72	4	508

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Balance.....	E. C. Pickering.....	144, 286	Nov. 4, 1873	96	32	4	486
Balance, Weighing and price.....	A. M. Maynard.....	144, 914	Nov. 25, 1873	649	220	4	565
Bale-band stretcher.....	F. M. Logue.....	141, 447	Aug. 5, 1873	33	11	4	138
Bale-tie.....	G. Brodie.....	142, 894	Sept. 16, 1873	508	173	4	306
Bale-tie.....	L. Carter.....	145, 091	Dec. 2, 1873	50	15	4	589
Bale-tie.....	F. Cook.....	135, 526	Feb. 4, 1873	120	38	3	137
Bale-tie.....	F. Cook.....	138, 479	May 6, 1873	13	4	3	498
Bale-tie.....	F. Cook.....	138, 480	May 6, 1873	13	4	3	498
Bale-tie.....	F. Cook.....	142, 772	Sept. 16, 1873	411	138	4	297
Bale-tie.....	F. Cook.....	143, 223	Sept. 30, 1873	792	273	4	355
Bale-tie.....	F. Cook.....	145, 847	Dec. 23, 1873	733	240	4	681
Bale-tie.....	P. K. Dederick.....	135, 700	Feb. 11, 1873	295	93	3	163
Bale-tie.....	J. W. Hedenberg.....	137, 549	Apr. 8, 1873	253	78	3	389
Bale-tie.....	E. P. Jones.....	139, 675	June 10, 1873	216	70	3	642
Bale-tie.....	J. McMurtry.....	142, 803	Sept. 16, 1873	435	147	4	299
Bale-tie.....	M. Quin.....	135, 938	Feb. 18, 1873	513	167	3	193
Bale-tie.....	W. C. Stiff.....	140, 556	July 1, 1873	183	62	4	23
Bale-tie clamp.....	T. D. Leonard.....	144, 776	Nov. 18, 1873	524	178	4	544
Bale-tie, Cotton.....	A. S. Armstrong.....	139, 754	June 10, 1873	298	92	3	648
Bale-tie, Cotton.....	G. N. Beard.....	143, 319	Sept. 30, 1873	874	299	4	362
Bale-tie, Cotton.....	G. N. Beard.....	145, 273	Dec. 9, 1873	216	74	4	615
Bale-tie, Cotton.....	A. G. Buford.....	144, 502	Nov. 11, 1873	284	96	4	513
Bale-tie, Cotton.....	R. W. Cobb.....	140, 575	July 8, 1873	215	72	4	37
Bale-tie, Cotton.....	F. Cook.....	138, 481	May 6, 1873	14	5	3	498
Bale-tie, Cotton.....	F. Cook.....	138, 482	May 6, 1873	14	5	3	499
Bale-tie, Cotton.....	F. Cook.....	138, 483	May 6, 1873	15	5	3	499
Bale-tie, Cotton.....	F. Cook.....	138, 484	May 6, 1873	15	5	3	499
Bale-tie, Cotton.....	F. Cook.....	139, 777	June 10, 1873	319	99	3	650
Bale-tie, Cotton.....	F. Cook.....	140, 246	June 24, 1873	747	236	3	701
Bale-tie, Cotton.....	F. Cook.....	140, 766	July 15, 1873	379	130	4	58
Bale-tie, Cotton.....	F. Cook.....	142, 001	Aug. 19, 1873	542	179	4	196
Bale-tie, Cotton.....	T. Cromer.....	143, 124	Sept. 23, 1873	706	242	4	332
Bale-tie, Cotton.....	W. Crone.....	141, 494	Aug. 5, 1873	77	24	4	141
Bale-tie, Cotton.....	W. D. Field.....	138, 492	May 6, 1873	21	7	3	499
Bale-tie, Cotton.....	W. D. Field.....	140, 024	June 17, 1873	535	169	3	675
Bale-tie, Cotton.....	A. J. Going.....	137, 301	Apr. 1, 1873	20	6	3	357
Bale-tie, Cotton.....	J. M. Goldsmith.....	143, 343	Sept. 30, 1873	901	306	4	364
Bale-tie, Cotton.....	B. Kimball.....	143, 911	Oct. 21, 1873	483	163	4	438
Bale-tie, Cotton.....	O. R. McClean.....	142, 802	Sept. 16, 1873	435	147	4	299
Bale-tie, Cotton.....	W. J. Orr.....	142, 505	Sept. 2, 1873	165	53	4	255
Bale-tie, Cotton.....	F. Quarles.....	144, 793	Nov. 18, 1873	537	183	4	545
Bale-tie, Cotton.....	W. C. Ramsay.....	137, 570	Apr. 8, 1873	273	84	3	390
Bale-tie, Cotton.....	D. S. Skinner.....	145, 536	Dec. 16, 1873	461	150	4	646
Bale-tie, Cotton.....	H. D. Starr.....	142, 527	Sept. 2, 1873	183	60	4	256
Bale-tie, Cotton.....	L. Weil.....	146, 037	Dec. 30, 1873	919	298	4	706
Bale-tie, Wire.....	G. L. Laughland.....	141, 879	Aug. 19, 1873	444	145	4	188
Bale-ties, Device for framing.....	J. McClean.....	145, 357	Dec. 9, 1873	288	96, 97	4	621
Baling hay, Device for.....	L. Doty.....	141, 636	Aug. 12, 1873	215	68	4	160
Baling-press.....	J. M. Albertson.....	139, 849	June 17, 1873	387	121	3	663
Baling-press.....	H. W. Baumann.....	141, 622	Aug. 12, 1873	202	64	4	159
Baling-press.....	H. K. Burnett.....	136, 965	Mar. 18, 1873	551	182	3	308
Baling-press.....	W. M. Conner.....	141, 035	July 22, 1873	639	215	4	89
Baling-press.....	J. B. Root.....	146, 096	Dec. 30, 1873	976	315	4	711
Baling-press.....	G. Winship.....	144, 245	Nov. 4, 1873	68	21	4	483
Baling-press, Hand-power.....	P. C. Ingersoll.....	144, 982	Nov. 25, 1873	705	238	4	570
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Ball and socket-joint.....	M. W. St. John.....	142, 293	Aug. 26, 1873	812	269	4	228
Balloon-advertiser.....	E. L. Moodie.....	136, 930	Mar. 18, 1873	521	172	3	305
Ballot-box.....	J. Gamber.....	141, 872	Aug. 19, 1873	438	143	4	188
Ballot-box, Registering.....	J. S. Savage.....	142, 124	Aug. 26, 1873	674	222	4	216
Balusters, Machines for cutting.....	P. J. Frantze, M. Tillesen, and J. A. Gregersen.....	141, 214	July 29, 1873	822	268	4	111
Band-comb.....	E. Brown.....	136, 358	Mar. 4, 1873	4	2	3	245
Band-comb.....	D. N. Ropes.....	145, 071	Dec. 2, 1873	28	9	4	589
Band, Endless.....	L. Binns.....	143, 743	Oct. 21, 1873	342	114	4	426
Bands, Apparatus for shrinking metal.....	W. Carr.....	141, 992	Aug. 19, 1873	533	176	4	196
Bands, Machine for making endless.....	L. Binns.....	145, 386	Dec. 9, 1873	309	{ 104 105 }	{ 4 3 }	{ 623 255 }
Banjo.....	H. C. Dobson.....	136, 491	Mar. 4, 1873	121	39	3	255
Banjo.....	J. S. Stiles.....	141, 182	July 22, 1873	779	255	4	99
Bar:							
<i>See</i> Boring-bar.							
Claw-bar.							
Clevis-bar.							
Grate-bar.							
Harvester-finger bar.							
Iron bar.							
Metal bar.							
Metallic bar.							
Miners' bar.							
Sickle-bar.							
Skylight-bar.							
Spike-bar.							
Tapered bar.							
Vehicle side-bar.							
Barbers' chair.....	P. Haberstick.....	135, 986	Feb. 18, 1873	553	{ 182 183 }	{ 3 3 }	{ 197 198 }
Barbers' chair.....	A. Schwaab.....	136, 009	Feb. 18, 1873	572	189	3	198
Bark-extracts, Apparatus for leaching and concentrat- ing.....	P. M. Church.....	140, 469	July 1, 1873	107	36	4	17
Bark-rossing machine.....	J. Martin and G. W. Wilson.....	141, 448	Aug. 5, 1873	34	11	4	138
Barrel.....	H. Willard.....	136, 196	Feb. 25, 1873	751	242	3	224
Barrel-cover.....	G. Hunt.....	137, 683	Apr. 8, 1873	368	114	3	398

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Barrel-head	J. W. Taylor	140, 095	June 17, 1873	602	190	3	681
Barrel-head centering device	J. J. Ralya	141, 816	Aug. 12, 1873	372	122	4	173
Barrel-head-lining	G. A. Reed	136, 763	Mar. 11, 1873	370	123	3	284
Barrel-header	C. B. Pettingill	137, 567	Apr. 8, 1873	267	82, 83	3	390
Barrel-heads, Making	J. L. Kilgore	144, 771	Nov. 18, 1873	520	177	4	543
Barrel-heater	A. E. Salisbury, and S. S. Steel ..	138, 531	May 6, 1873	58	19	3	502
Barrel-heading mechanism	J. Griffing	136, 595	Mar. 11, 1873	232	78	3	273
Barrel-hoop	H. Ogborn	144, 920	Nov. 25, 1873	654	222	4	565
Barrel-hoop	H. Willard	140, 862	July 15, 1873	463	156	4	65
Barrel-hoops, Staple for securing the ends of ..	H. Ogborn	140, 430	July 1, 1873	73	26	4	14
Barrel-making machine	H. P. Hall	140, 776	July 15, 1873	386	133	4	59
Barrel-making machinery	C. Ruggles	144, 635	Nov. 18, 1873	406	136	4	534
Barrel-pitching apparatus	G. Sichter	139, 976	June 17, 1873	493	156	3	672
Barrel-stand and keg-holder	C. N. Cass	140, 573	July 8, 1873	213	71	4	37
Barrel-support	F. W. Claussen	136, 416	Mar. 4, 1873	54	19	3	250
Barrel-transporter	J. Griffing	140, 364	July 1, 1873	24	8	4	10
Barrel-washer	A. Muntzenberger	145, 003	Nov. 25, 1873	724	244	4	571
Barrels, &c., Apparatus for steaming and cleaning ..	A. K. Lee	138, 810	May 13, 1873	315	97	3	533
Barrels, boxes, &c., Machine for lifting and carrying ..	J. W. Babcock	135, 958	Feb. 18, 1873	529	174	3	195
Barrels, casks, &c., Machine for pitching	G. Meyer	135, 139	Jan. 21, 1873	591	192	3	83
Barrels, &c., Fermentation-guard for	A. P. Gardner	145, 860	Dec. 23, 1873	743	243	4	682
Barrels, &c., Implements for rolling, guiding and con- tolling	B. V. Tamplin	138, 055	Apr. 22, 1873	724	229	3	449
Barrels, Machine for forcing hoops on	J. Greenwood	145, 942	Dec. 16, 1873	841	274	4	700
Barrels with glue, Process of lining oil	E. W. Leggett	143, 770	Oct. 21, 1873	364	.....	4	428
Barrow, Truck	J. J. Richardson	135, 157	Jan. 21, 1873	604	196	3	84
Barrow, Wheel	J. M. and J. L. Jones	143, 767	Oct. 21, 1873	362	120	4	428
Barrow, Wheel	J. B. Schneider	139, 823	June 10, 1873	360	111	3	653
Baryta, Manufacture of	C. M. T. DuMotay	144, 517	Nov. 11, 1873	295	100	4	514
Basket	W. C. Higgins	137, 368	Apr. 1, 1873	81	26	3	363
Basket	H. C. Jones	142, 343	Sept. 2, 1873	19	7	4	243
Basket	S. H. Wheeler	141, 023	July 22, 1873	630	212	4	88
Basket and bird-cage, Combined hanging	S. Vanstone	137, 980	Apr. 15, 1873	635	200	3	433
Basket-form	A. F. Scow	138, 765	May 13, 1873	277	86	3	530
Basket-form	A. F. Scow	139, 025	May 20, 1873	508	160	3	562
Basket, Grain	G. P. Coan	144, 018	Oct. 28, 1873	602	199	4	457
Basket, Grain	H. C. Jones	137, 845	Apr. 15, 1873	523	163	3	424
Basket, Grain	H. C. Jones	137, 846	Apr. 15, 1873	523	163	3	424
Basket, Grain	H. C. Jones	142, 341	Sept. 2, 1873	17	6	4	243
Basket, Grain	H. C. Jones	142, 342	Sept. 2, 1873	18	6	4	243
Basket, Machine for making	J. Moore and S. W. Day	134, 920	Jan. 14, 1873	392	124	3	51
Basket, Wire	D. Sherwood	135, 943	Feb. 18, 1873	517	169	3	194
Basket, Work	T. V. Hobbs	139, 508	June 3, 1873	56	18	3	613
Bath:							
<i>See</i> Shower-bath							
Swimming-bath							
Bath-tub	L. Bagger	139, 995	June 17, 1873	508	161	3	673
Bath-tub, Electro-medical	S. Russell, jr	139, 819	June 10, 1873	356	110	3	633
Bath-tub plug-socket	R. C. Scrimgeour	137, 726	Apr. 8, 1873	410	126	3	402
Baton, Policeman's	S. Berry	143, 610	Oct. 14, 1873	197	66	4	405
Battery:							
<i>See</i> Galvanic battery.							
Non-freezing battery.							
Batting, Machine for making	F. W. Bloodgood	145, 615	Dec. 16, 1873	523	172	4	652
Bayonet attachment	J. W. Neil	134, 608	Jan. 7, 1873	103	33	3	15
Bayonet-socket	B. Burton	143, 495	Oct. 7, 1873	83	28	4	387
Beading sheet-metal vessels, Machine for	C. W. Priest	137, 147	Mar. 25, 1873	721	{ 239 } { 240 }	3	333
Beam, Composite	W. W. Lummus	139, 902	June 17, 1873	439	136	3	667
Beam, Floor	W. W. Lummus	139, 903	June 17, 1873	439	137	3	667
Beam, Floor	W. W. Lummus	139, 904	June 17, 1873	440	137	3	667
Beam, Wrought-iron	L. Kirkup	138, 029	Apr. 22, 1873	699	221	3	447
Beams and columns, Connection for wrought-iron ..	A. Bonzano	140, 455	July 1, 1873	93	32	4	16
Beater and compressing press	G. Ertel	135, 533	Feb. 4, 1873	127	40, 41	3	137
Beater-press	J. Cory	135, 780	Feb. 11, 1873	360	116	3	168
Bed and frame, Spring	W. Z. Cooke	135, 892	Feb. 18, 1873	478	154	3	191
Bed and mattress filling	J. C. Wightman	145, 140	Dec. 2, 1873	96	.....	4	593
Bed-bottom	P. Anderson	142, 549	Sept. 9, 1873	213	69	4	271
Bed-bottom	A. H. Bell	134, 839	Jan. 14, 1873	321	102	3	46
Bed-bottom	H. Benedict	140, 571	July 8, 1873	212	71	4	37
Bed-bottom	P. Boesen and M. Bedessem	135, 965	Feb. 18, 1873	535	177	3	195
Bed-bottom	E. L. Brockett	140, 005	June 17, 1873	517	164	3	674
Bed-bottom	E. G. Cameron	135, 774	Feb. 11, 1873	356	114	3	167
Bed-bottom	L. M. Crosby and E. G. Cameron ..	144, 959	Nov. 25, 1873	686	232	4	568
Bed-bottom, &c	J. Dreuskie	143, 970	Oct. 28, 1873	554	184	4	453
Bed-bottom	D. Frankfoder	140, 492	July 1, 1873	126	44	4	18
Bed-bottom	S. B. Freeman	144, 754	Nov. 18, 1873	507	172	4	542
Bed-bottom	F. K. Garretson and W. Fulghun ..	138, 630	May 6, 1873	143	46	3	509
Bed-bottom	C. Gense	137, 909	Apr. 15, 1873	577	181	3	428
Bed-bottom	P. C. Hard	136, 158	Feb. 25, 1873	722	233	3	222
Bed-bottom	B. Holmes	135, 989	Feb. 18, 1873	556	184	4	197
Bed-bottom	E. Hoyt	144, 906	Nov. 25, 1873	642	218	3	564
Bed-bottom	M. A. Hunt	138, 252	Apr. 29, 1873	920	290	3	474
Bed-bottom	S. L. Leach	140, 284	June 24, 1873	781	247	3	704
Bed-bottom	T. L. Odell and J. C. Hudson	135, 724	Feb. 11, 1873	314	100	3	164
Bed-bottom	H. Ogborn and A. W. Kendrick ..	135, 725	Feb. 11, 1873	314	100	3	164
Bed-bottom	H. Ogborn and A. W. Kendrick ..	135, 835	Feb. 11, 1873	415	135	3	171
Bed-bottom	H. Ogborn and A. W. Kendrick ..	135, 933	Feb. 18, 1873	509	166	3	193
Bed-bottom	H. Ogborn and A. W. Kendrick ..	136, 382	Mar. 4, 1873	28	10	3	247
Bed-bottom	C. Penfield	135, 580	Feb. 4, 1873	178	56	3	141
Bed-bottom	E. W. Quincy	140, 387	July 1, 1873	45	15	4	11
Bed-bottom	R. Rabestraw	135, 844	Feb. 11, 1873	22	137	3	172

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Bed-bottom	C. V. Reeder	140,540	July 1, 1873	168	57	4	22
Bed-bottom	W. H. Sears	143,190	Sept. 23, 1873	758	261	4	336
Bed-bottom	T. J. Sheears	140,955	July 15, 1873	552	185	4	72
Bed-bottom	W. W. Skaats	143,035	Sept. 23, 1873	635	217	4	326
Bed-bottom	C. B. Spencer	145,023	Nov. 25, 1873	741	250	4	573
Bed-bottom	J. V. Taylor	140,856	July 15, 1873	456	155	4	65
Bed-bottom	A. Turnbull	137,511	Apr. 1, 1873	214	65	3	374
Bed-bottom	B. C. Vanduzen	137,039	Mar. 18, 1873	616	204	3	313
Bed-bottom	A. S. Wells	137,398	Apr. 1, 1873	106	34	3	365
Bed-bottom	N. O. Wilcox	138,971	May 13, 1873	448	141	3	545
Bed-bottom, Invalid	C. A. Towsley	136,562	Mar. 4, 1873	189	62	3	260
Bed-bottom, Spring	C. L. Ames and A. H. Frost	143,397	Oct. 7, 1873	1	1	4	381
Bed-bottom, Spring	H. H. Blair and S. Barry	138,472	May 6, 1873	7	3	3	498
Bed-bottom, Spring	G. W. Brown	142,895	Sept. 16, 1873	509	174	4	306
Bed-bottom, Spring	I. Bush	135,885	Feb. 18, 1873	472	152	3	190
Bed-bottom, Spring	C. H. Dunks	142,377	Sept. 2, 1873	49	17	4	246
Bed-bottom, Spring	S. Dunlap	136,494	Mar. 4, 1873	123	40	3	255
Bed-bottom, Spring	E. S. Field	138,490	May 6, 1873	19	7	3	499
Bed-bottom, Spring	E. S. Field	138,491	May 6, 1873	20	7	3	499
Bed-bottom, Spring	C. Gammel	139,567	June 3, 1873	107	36	3	617
Bed-bottom, Spring	H. A. Hight, sr.	146,072	Dec. 30, 1873	952	307	4	709
Bed-bottom, Spring	E. B. Hill and E. Van Valkenburg	142,391	Sept. 2, 1873	65	21	4	247
Bed-bottom, Spring	J. S. Judson	144,338	Nov. 4, 1873	137	46	4	489
Bed-bottom, Spring	W. C. McGill	144,688	Nov. 18, 1873	451	153	4	538
Bed-bottom, Spring	C. W. Northrup	143,373	Sept. 30, 1873	928	314	4	366
Bed-bottom, Spring	H. Ogborn and A. W. Kendrick	136,665	Mar. 11, 1873	290	97	3	278
Bed-bottom, Spring	J. Pollitt	141,726	Aug. 12, 1873	288	94	4	166
Bed-bottom, Spring	S. H. Reeves	138,529	May 6, 1873	56	19	3	502
Bed-bottom, Spring	J. L. Secomb	134,614	Jan. 7, 1873	106	35	3	15
Bed-bottom, Spring	E. G. Sherman	138,348	Apr. 29, 1873	1,006	317	3	480
Bed-bottom, Spring	W. D. Spencer and E. Parker	137,498	Apr. 1, 1873	203	62	3	373
Bed-bottom, Spring	W. Starke	138,446	Apr. 29, 1873	1,093	345	3	487
Bed-bottom, Spring	S. A. Thompson and C. T. Kendrick	138,056	Apr. 22, 1873	725	229	3	450
Bed-bottom, Spring	J. A. Van Wert and A. Crooley	140,975	July 15, 1873	574	193	4	74
Bed-bottom, Spring-fastener for	D. A. Scott	138,203	Apr. 22, 1873	850	269	3	460
Bed-bug exterminator	C. L. Fewell	139,562	June 3, 1873	103	34	3	617
Bed-bug trap for bedstead	C. Legab	137,936	Apr. 15, 1873	596	188	3	430
Bed-cot	L. B. Morse	135,573	Feb. 4, 1873	166	53	3	140
Bed, Head-rest for	B. F. Walton	136,395	Mar. 4, 1873	38	14	3	248
Bed-lounge	G. Hartzell	137,677	Apr. 8, 1873	364	113	3	398
Bed or cradle guard	J. J. Roll	136,097	Feb. 18, 1873	649	212	3	204
Bed, Sofa	E. N. Doring	145,404	Dec. 9, 1873	328	110	4	629
Bed-spring	J. H. Baker and A. Doney	136,692	Mar. 11, 1873	311	103	3	274
Bed, Spring	O. C. Campbell	137,287	Apr. 1, 1873	7	3	3	357
Bed, Spring	W. W. Jones	144,984	Nov. 25, 1873	706	239	4	570
Bed, Spring	F. R. Smith	138,589	May 6, 1873	708	35	3	506
Bed, Spring	S. Smith and J. H. Gill	143,854	Oct. 21, 1873	439	146	4	434
Bed, Spring	S. Stout	139,627	June 3, 1873	157	52	3	622
Bed, Spring	D. E. Taylor	137,260	Mar. 25, 1873	827	272	3	340
Bedstead	F. G. Ford	137,191	Mar. 25, 1873	764	252	3	336
Bedstead	E. Morris	145,305	Dec. 9, 1873	243	82	4	617
Bedstead	H. D. Olds	138,756	May 13, 1873	270	83	3	529
Bedstead	D. C. Raub	138,582	May 6, 1873	102	33	3	506
Bedstead, Bureau or wardrobe	C. May	136,443	Mar. 4, 1873	77	27	3	251
Bedstead crib-attachment	E. F. Bryan	134,847	Jan. 14, 1873	328	104	3	46
Bedstead crib-attachment	B. Snyder	139,829	June 10, 1873	364	113	3	654
Bedstead crib-attachment	M. W. Tarbell and J. H. P. Inslee	136,280	Feb. 25, 1873	824	266	3	230
Bedstead-fastening	J. M. Baird	143,431	Oct. 7, 1873	32	11	4	383
Bedstead-fastening	L. G. Bradford	136,301	Feb. 25, 1873	842	272	3	231
Bedstead-fastening	J. F. Mancha	135,279	Jan. 28, 1873	737	237	3	107
Bedstead-fastening	C. Wolf	142,973	Sept. 16, 1873	578	195	4	312
Bedstead-fastening	C. Wolf	139,844	June 10, 1873	375	117	3	655
Bedstead-fastening	C. Wolf	145,266	Dec. 2, 1873	205	70	4	601
Bedstead, Folding	A. G. Bayles, J. W. H. Carroll, and G. D. Miner	138,840	May 13, 1873	344	106	3	536
Bedstead, Folding	J. L. Killgore	137,690	Apr. 8, 1873	375	116	3	399
Bedstead, Invalid	A. Bray	139,493	June 3, 1873	46	14	3	612
Bedstead, Invalid	C. M. Clinton and E. J. Morgan	137,596	Apr. 8, 1873	292	91	3	392
Bedstead, Invalid	O. G. Cosby	137,828	Apr. 15, 1873	506	158	3	422
Bedstead, Invalid	G. W. Grote	138,083	Apr. 22, 1873	746	236	3	451
Bedstead, Invalid	J. Robinson	140,646	July 8, 1873	275	93	4	42
Bedstead, Parlor	F. E. Coffin	139,454	June 3, 1873	8	3	3	609
Bedstead, Sofa	J. Beiersdorf	140,453	July 1, 1873	92	31	4	16
Bedstead, Sofa	J. Brada	134,843	Jan. 14, 1873	324	103	3	46
Bedstead, Sofa	C. F. Grundin	139,952	June 17, 1873	476	150	3	670
Bedstead, Sofa	J. B. Harlow	135,643	Feb. 11, 1873	244	77	3	159
Bedstead, Sofa	P. J. Larson	145,508	Dec. 16, 1873	432	140	4	644
Bedstead, Sofa	E. Lord	145,741	Dec. 23, 1873	644	211	4	674
Bedstead, Sofa	E. Lovell	142,249	Aug. 26, 1873	777	256	4	225
Bedstead, Sofa	C. Rossow	138,819	May 13, 1873	324	100	3	534
Bedstead, Sofa	J. K. Stockton	136,276	Feb. 25, 1873	820	265	3	229
Bedstead, Sofa	C. Streit	137,505	Apr. 1, 1873	210	64	3	374
Bedstead, Sofa	S. M. and S. A. Winn	143,553	Oct. 7, 1873	141	47	4	392
Bedstead, Wardrobe	C. L. Barritt	140,109	June 24, 1873	634	199	3	691
Bedstead, Wardrobe	J. Byrnes	138,610	May 6, 1873	122	40	3	508
Bedstead, Wardrobe	R. W. Frost	137,356	Apr. 1, 1873	72	23	3	363
Bedstead, Wardrobe	E. Hunter and D. Van Sickle	139,316	May 27, 1873	789	251	3	592
Bedstead, Wardrobe	J. Smith	137,628	Apr. 8, 1873	318	99	3	394
Bee-hive	L. Adams	145,324	Dec. 9, 1873	264	88	4	619
Bee-hive	A. M. Brubaker and B. R. Witmer	136,642	Mar. 11, 1873	272	91	3	276
Bee-hive	S. T. Davis	137,831	Apr. 15, 1873	510	159	3	423
Bee-hive	A. Deweese	137,348	Apr. 1, 1873	66	21	3	362
Bee-hive	L. J. Diehl	145,634	Dec. 16, 1873	539	177	4	653

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Bee-hive	J. R. East	144, 750	Nov. 18, 1873	502	170	4	542
Bee-hive	C. Finn	137, 834	Apr. 15, 1873	514	160	3	423
Bee-hive	E. Gerry	137, 433	Apr. 1, 1873	138	45	3	368
Bee-hive	D. L. Grover	140, 497	July 1, 1873	131	45	4	19
Bee-hive	E. E. Henegan	140, 702	July 8, 1873	321	109	4	46
Bee-hive	W. S. Hough	144, 847	Nov. 25, 1873	598	203	4	560
Bee-hive	E. Kretchmer	138, 661	May 6, 1873	171	55	3	511
Bee-hive	D. Latchaw	141, 443	Aug. 5, 1873	29	9, 10	4	137
Bee-hive	W. Lehman	135, 566	Feb. 4, 1873	159	51	3	140
Bee-hive	D. Loofbourrow	134, 687	Jan. 7, 1873	178	58	3	21
Bee-hive	D. M. Calvin	137, 530	Apr. 8, 1873	238	73	3	388
Bee-hive	D. M. Calvin	145, 048	Dec. 2, 1873	5	2	4	586
Bee-hive	G. Miller	143, 295	Sept. 30, 1873	854	293	4	360
Bee-hive	J. Newman and N. Brown	136, 933	Mar. 18, 1873	524	173	3	305
Bee-hive	D. Rice	141, 818	Aug. 12, 1873	374	122	4	173
Bee-hive	S. Rogers and A. J. Mason	142, 281	Aug. 26, 1873	803	265	4	227
Bee-hive	J. H. Shook	143, 643	Oct. 14, 1873	226	76	4	407
Bee-hive	H. P. Simmons	135, 493	Feb. 4, 1873	91	29	3	134
Bee-hive	C. J. Sperry and L. Chandler	143, 307	Sept. 30, 1873	864	296	4	361
Bee-hive	A. J. Sternberg	142, 748	Sept. 9, 1873	380	127	4	284
Bee-hive	J. H. Stockwell	143, 937	Oct. 21, 1873	503	170	4	439
Bee-hive	N. W. Walton and J. L. Cunningham	142, 537	Sept. 2, 1873	193	62	4	257
Bee-hive	R. H. Woodside	137, 645	Apr. 8, 1873	333	103	3	395
Bee-hive	A. T. Wright	142, 318	Aug. 26, 1873	831	276	4	229
Bee-hive, Fumigator for	A. R. Denlinger	139, 881	June 17, 1873	417	130	3	665
Bee-hive honey-box	H. M. Johnson and C. M. Barker	134, 674	Jan. 7, 1873	166	55	3	20
Bee-hive, Moth-trap for	L. Gates	136, 911	Mar. 18, 1873	506	167	3	304
Bee-keepers' protecting-mask	L. C. Huff	140, 417	July 1, 1873	64	23	4	13
Beefsteak-tenderer	J. S. Morris	144, 216	Nov. 4, 1873	42	12	4	481
Beer and other liquids from barrels, Apparatus for forcing	J. Devlin	139, 882	June 17, 1873	418	130	3	665
Beer and wine, Cooler for preserving	F. Loesch	145, 955	Dec. 30, 1873	852	277	4	701
Beer and yeast, Manufacture of	L. Pasteur	141, 072	July 22, 1873	671	225	4	91
Beer, Apparatus for preserving and forcing	E. C. Krausnick	144, 987	Nov. 25, 1873	708	239	4	570
Beer-cask	M. Seitz	139, 334	May 27, 1873	800	255	3	593
Beer-cooler	J. Chandless	135, 688	Feb. 11, 1873	286	90	3	162
Beer-cooler	J. Gimlich	139, 310	May 27, 1873	785	250	3	592
Beer-cooler	A. Pfund	140, 073	June 17, 1873	581	184	3	679
Beer-cooler	A. F. Rick	138, 195	Apr. 22, 1873	844	267	3	459
Beer-cooler	F. Schmidt	138, 289	Apr. 29, 1873	956	301	3	476
Beer-cooler, Tap-holder attachment for	J. H. Fisher	143, 068	Sept. 23, 1873	663	227	4	328
Beer-mug	W. C. King	146, 078	Dec. 30, 1873	957	309	4	709
Beer on draught, Apparatus for preserving	J. W. Moore	141, 944	Aug. 19, 1873	495	163	4	192
Beer, Process for preserving	A. Adametz	142, 428	Sept. 2, 1873	93	31	4	250
Bell attachment, Alarm	A. Sherwood	142, 287	Aug. 26, 1873	807	267	4	227
Bell, Call	H. Stratton	135, 860	Feb. 11, 1873	434	141	3	173
Bell-clasp, Leather	L. Sanders	136, 549	Mar. 4, 1873	179	58	3	259
Bell, Door	J. Harrison	138, 151	Apr. 22, 1873	799	255	3	456
Bell, Door	W. M. Preston	142, 412	Sept. 2, 1873	79	26	4	249
Bell, Door	E. B. Sims	142, 953	Sept. 16, 1873	561	190	4	310
Bell, Door	A. A. Stuart	139, 206	May 20, 1873	678	213	3	576
Bell-pull	W. T. Munger	139, 687	June 10, 1873	228	73	3	643
Bell-pull	A. L. Swan	142, 057	Aug. 19, 1873	599	197	4	200
Bell-ringer, Steam	J. West and O. M. Parker	134, 719	Jan. 7, 1873	204	66	3	23
Bell-ringing	J. Harrison	139, 147	May 20, 1873	623	195	3	571
Bellows	W. Pilcher	141, 888	Aug. 19, 1873	451	147	4	189
Bellows of furnace, Operating	H. Crumlish	143, 439	Oct. 7, 1873	37	13	4	384
Belt-clamp	E. Ainsworth	143, 604	Oct. 14, 1873	192	65	4	405
Belt, Driving	W. R. Colton	135, 409	Feb. 4, 1873	15	5	3	129
Belt, Driving	A. Schpakowsky	145, 907	Dec. 23, 1873	788	258	4	685
Belt, Endless driving	J. F. Reigart	145, 447	Dec. 9, 1873	362	121	4	627
Belt-fastener	A. Hyde	140, 419	July 1, 1873	65	23	4	13
Belt-fastening	J. E. Richard	138, 194	Apr. 22, 1873	843	267	3	459
Belt-fastening	T. Ruediger	135, 492	Feb. 4, 1873	90	28	3	134
Belt-fastening	P. Subit	143, 474	Oct. 7, 1873	63	22	4	386
Belt-gearing, Idler for	T. Bell and J. F. Hillerich	141, 417	Aug. 5, 1873	6	2	4	135
Belt-holt cover	T. P. Rodgers	144, 144	Oct. 28, 1873	703	233	4	466
Belt-hole scupper	B. L. Wood	144, 816	Nov. 18, 1873	557	189	4	546
Belt-lacing gage	H. Gould	138, 639	May 6, 1873	151	49	3	510
Belt-lacing needle	J. W. Smith	138, 540	May 6, 1873	64	22	3	503
Belt-shifter and tightener	B. O'Bryan	140, 299	June 24, 1873	793	252	3	705
Belt-shifting apparatus	O. H. Wade	143, 736	Oct. 14, 1873	316	105	4	414
Belt-tension apparatus	S. E. Jewett	141, 004	July 22, 1873	614	207	4	86
Belt-tightener	W. Sellers	145, 908	Dec. 23, 1873	789	258	4	685
Belt, Tool for use in lacing	F. N. DuBois	132, 740	May 13, 1873	256	79	3	528
Belt, Waist	J. H. Vogt and G. Dietzel	136, 685	Mar. 11, 1873	306	101	3	279
Belting	W. P. Powers	142, 272	Aug. 26, 1873	796	262	4	226
Belting, Apparatus for manufacture of vulcanized rubber	D. C. Gately and J. B. Forsyth	141, 433	Aug. 5, 1873	20	6	4	136
Belting, hose, &c., Plate for vulcanizing	D. C. Gately	140, 494	July 1, 1873	129	44	4	19
Bench:							
<i>See</i> Carpenter's bench.							
Saw-bench.							
Wash-bench.							
Work-bench.							
Bench-hook	D. Boyce	143, 054	Sept. 23, 1873	654	224	4	327
Bending-machine	S. W. Kimble	144, 109	Oct. 28, 1873	676	223	4	464
Bending machine, Wood	H. Hanna	145, 416	Dec. 9, 1873	338	113	4	625
Berth for vessels	B. Weisker	139, 638	June 3, 1873	170	56	3	623
Berth for vessels, Oscillating	B. Weisker	141, 614	Aug. 5, 1873	179	57	4	150
Berth-lock for sleeping-cars	T. A. Bissell	145, 835	Dec. 23, 1873	719	237	4	680
Berth, Ship's oscillating	I. A. Chomel	140, 014	June 17, 1873	525	166	3	674
Bessemer or Kelly converters, Compound for lining bottoms of	J. E. Atwood	138, 780	May 13, 1873	290		3	531

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Bevel, Carpenter's	H. Fairbanks and I. J. Robinson.	136, 714	Mar. 11, 1873	329	109	3	281
Bevel, Carpenter's	S. D. Sargent	141, 081	July 22, 1873	681	228	4	92
Bevel-rest	J. E. Seavey	146, 027	Dec. 30, 1873	913	296	4	706
Beverage cooling and dispensing apparatus	J. Matthews	138, 671	May 6, 1873	182	58	3	512
Bilge-water, Device for discharging	J. A. Miller	135, 656	Feb. 11, 1873	254	80	3	160
Billiard-cue	L. Nemetz	136, 535	Mar. 4, 1873	165	53	3	258
Billiard-cue	H. Platts	139, 519	June 3, 1873	64	22	3	614
Billiard-cue clamp	O. D. Benjamin	144, 824	Nov. 25, 1873	576	196	4	558
Billiard-cue tip	G. W. Dickinson	144, 324	Nov. 4, 1873	126	42	4	489
Billiard-cushion	H. A. Alden	138, 356	Apr. 29, 1873	1, 013	319	3	481
Billiard-cushion	W. St. Martin	139, 434	May 27, 1873	892	287	3	601
Billiard-light	W. St. Martin	136, 275	Feb. 25, 1873	819	{ 264 } 265	{ 3 } 3	229
Billiard-table	A. and F. Braun	142, 202	Aug. 26, 1873	739	243	4	222
Billiard-table	E. Brunswick	138, 609	May 6, 1873	122	40	3	508
Billiard-table	G. Buntin	138, 850	May 13, 1873	352	109	3	536
Billiard-table	G. Buntin	141, 539	Aug. 5, 1873	112	35	4	144
Billiard-table	H. W. Collender	145, 787	Dec. 23, 1873	683	224	4	677
Billiard-table	L. C. Prindle	140, 162	June 24, 1873	680	213	3	695
Billiard-table	C. Schulenburg	145, 533	Dec. 16, 1873	458	150	4	646
Billiard-table	S. H. Waldie	144, 716	Nov. 18, 1873	473	160	4	540
Billiard-table ball-holder	H. W. Collender	143, 500	Oct. 7, 1873	87	30	4	387
Billiard-table chalk-holder	H. W. Collender	143, 885	Oct. 21, 1873	463	156	4	436
Billiard-table cushion	S. Brunswick and H. Borlinghaus, sr.	143, 961	Oct. 28, 1873	547	181	4	453
Billiard-table cushion	J. E. Came	142, 435	Sept. 2, 1873	98	32	4	250
Billiard-table cushion	G. E. Phelan	136, 178	Feb. 25, 1873	738	237	3	223
Billiard-table leveler	D. H. Hill	144, 028	Oct. 28, 1873	609	201	4	458
Bin:							
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Binder, Temporary	W. H. Barnard	139, 998	June 17, 1873	511	162	3	673
Binder, Temporary	D. Dunton	137, 131	Mar. 25, 1873	708	235	3	332
Binding-folder	E. P. West	138, 772	May 13, 1873	283	88	3	530
Bird-cage	G. Günther	138, 396	Apr. 29, 1873	1, 045	329	3	483
Bird-cage	E. Hutchinson	144, 907	Nov. 25, 1873	642	219	4	564
Bird-cage	O. Lindemann	135, 567	Feb. 4, 1873	160	52	3	140
Bird-cage	J. Maxheimer	145, 886	Dec. 23, 1873	769	251	4	684
Bird-cage	G. J. Munschauer	136, 611	Mar. 11, 1873	243	82	3	274
Bird-cage bath-tub	G. T. and G. E. Peters	138, 692	May 6, 1873	199	63	3	513
Biscuit-cutting machine	J. and S. Turner	137, 114	Mar. 25, 1873	694	231	3	331
Biscuit, Manufacture of sweet	H. Even	137, 766	Apr. 15, 1873	455		3	418
Bit:							
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Auger-bit.							
Boring-bit.							
Bridle-bit.							
Expansive-bit.							
Bit-brace	W. E. Pureau	145, 524	Dec. 16, 1873	447	146	4	645
Bit-stock	A. P. Daboll	139, 876	June 17, 1873	413	129	3	665
Bit-stock	L. Feely	146, 056	Dec. 30, 1873	941	303	4	708
Bit-stock	A. D. Goodell	139, 667	June 10, 1873	209	68	3	642
Bit-stock	A. D. Goodell	141, 345	July 29, 1873	946	308	4	121
Bit-stock	D. A. Newton	144, 123	Oct. 28, 1873	686	227	4	464
Bitumen, ore, &c., Compound of	P. Lea	144, 396	Nov. 11, 1873	198	.....	4	506
Blackboard	J. Reber	144, 289	Nov. 4, 1873	98	33	4	486
Blackboard	T. J. Thorp	135, 019	Jan. 21, 1873	493	158	3	75
Blackboard, Adjustable	P. W. Moeller	144, 917	Nov. 25, 1873	652	221	4	565
Blackboard eraser	W. S. Read	135, 487	Feb. 4, 1873	87	27	3	134
Blackboard, Revolving	C. B. Lyon	144, 212	Nov. 4, 1873	38	11	4	481
Blackboard-rubber	P. B. Horton	144, 674	Nov. 18, 1873	438	148	4	537
Blacking-box cover	J. B. Shaler	138, 102	Apr. 22, 1873	762	242	3	453
Blacking-box holder	S. T. Wyman	145, 544	Dec. 16, 1873	467	152	4	647
Blacking-case	G. H. Rice	137, 722	Apr. 8, 1873	407	125	3	401
Blacking for leather	A. D. Strong	141, 829	Aug. 12, 1873	383	.....	4	174
Blacking for shoes, &c	J. L. Sneed	144, 801	Nov. 18, 1873	545	.....	4	545
Blast and cupola furnace	D. W. Hendrickson	139, 891	June 17, 1873	427	133	3	666
Blast and cupola furnace	F. Lawrence	142, 482	Sept. 2, 1873	143	47	4	253
Blast and puddling furnace for making wrought-iron direct from the ore, Combined rotary.	J. Neville	138, 429	Apr. 29, 1873	1, 078	340	3	486
Blast-furnace	E. B. Andrews	143, 487	Oct. 7, 1873	75	26	4	387
Blast-furnace	J. G. Blunt	137, 884	Apr. 15, 1873	552	173	3	426
Blast-furnace	F. Büttgenback	144, 829	Nov. 25, 1873	579	{ 197 } 198	{ 4 } 4	559
Blast-furnace	D. W. Hendrickson	137, 366	Apr. 1, 1873	80	26	3	363
Blast-furnace	J. V. Woodhouse	139, 489	June 3, 1873	42	13	3	612
Blast-furnace alarm-apparatus	E. Davis	139, 300	May 27, 1873	776	246	3	591
Blast-furnace breast-plate	R. A. Fisher	141, 043	July 22, 1873	646	217	4	89
Blast-furnace, Cinder-plate for	S. W. Harris	142, 463	Sept. 2, 1873	127	42	4	252
Blast-furnace for smelting iron and other ores	S. W. Harris	142, 464	Sept. 2, 1873	128	42	4	252
Blast-furnace slag, Apparatus for cooling and removing	A. Kroman	140, 927	July 15, 1873	526	176	4	70
Blasting, Charging and tamping platform for submarine.	J. Burson	139, 452	June 3, 1873	5	2	3	609
Blasting, Package of powder-charges for	H. M. Boies	144, 434	Nov. 11, 1873	231	77	4	509
Blasting-plug	J. H. Holsey	140, 628	July 8, 1873	259	88	4	41
Blasting-plug	D. Shoemaker	142, 948	Sept. 16, 1873	555	188	4	310
Blasting rocks, Method of	I. Whitcomb	141, 248	July 29, 1873	854	279	4	113
Blasting-squib	S. H. Daddow	143, 396	Sept. 30, 1873	945	320	4	367
Bleaching damaged cotton	J. B. Richards	145, 816	Dec. 23, 1873	606	.....	4	679
Bleaching-liquors, Manufacture of	H. Deacon	139, 239	May 27, 1873	721	.....	3	587
Blind, Corner-support for	G. W. Day	140, 120	June 24, 1873	644	202	3	692
Blind, Inside	D. Y. Kilgore	139, 899	June 17, 1873	437	135	3	667
Blind, Inside	E. Metcalf	141, 286	July 29, 1873	885	290	4	116
Blind, Inside	W. Potter, jr.	138, 761	May 13, 1873	273	84	3	529
Blind-opener and slat-regulator, Combined	A. Ball	135, 063	Jan. 21, 1873	531	172	3	78
Blind-slat adjuster, Window	R. C. Beach and G. A. Berry	145, 481	Dec. 16, 1873	402	132	4	642

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Blind-slat fastener.....	G. W. Brooks.....	142, 674	Sept. 9, 1873	317	105	4	279
Blind-slat fastener.....	A. F. Champlin.....	144, 062	Oct. 28, 1873	638	210	4	460
Blind-slat fastener.....	T. G. Springer.....	142, 526	Sept. 2, 1873	183	60	4	256
Blind-slat, Machine for entering.....	J. Church.....	139, 043	May 20, 1873	521	165	3	563
Blind-slat, Mold for making glass.....	E. B. Hungerford.....	136, 835	Mar. 18, 1873	444	147	3	299
Blind-slat-operator, Window.....	E. C. Byam.....	145, 842	Dec. 23, 1873	727	239	4	680
Blind-slat staple.....	C. H. Palmer.....	139, 516	June 3, 1873	63	21	3	614
Blind-stiles boring-machine.....	A. B. Carlin.....	141, 545	Aug. 5, 1873	118	37	4	145
Blind-stiles boring-machine.....	L. G. Kirkham.....	137, 932	Apr. 15, 1873	594	187	3	430
Blind, Stitching-gage for the.....	W. R. Richardson.....	140, 645	July 8, 1873	274	93	4	42
Blind-stop.....	J. H. Cranston.....	144, 019	Oct. 28, 1873	602	199	4	457
Blind-stop.....	J. Weber.....	143, 207	Sept. 23, 1873	772	266	4	337
Blind, Window.....	L. Park.....	136, 858	Mar. 18, 1873	462	153	3	301
Blind, Window.....	M. C. Weld.....	141, 841	Aug. 12, 1873	393	128	4	174
Blinds, Machine for wiring.....	C. McGill.....	143, 521	Oct. 7, 1873	103	36	4	389
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Building-block.							
Hat-block.							
Head-block.							
Last-block.							
Presser-block.							
Pulley-block.							
Bibbon-block.							
Saw-mill head-block.							
Tackle-block.							
Toy-block.							
Toy building-block.							
Block-fitting machine.....	E. H. Woodsum.....	144, 427	Nov. 11, 1873	226	76	4	508
Bloom-rolling machine.....	G. W. Billings.....	139, 358	May 27, 1873	818	262	3	595
Blow-pipe.....	J. E. McClure and D. H. Ainsworth.	144, 345	Nov. 4, 1873	143	48	4	490
Blow-pipe, Steam.....	J. S. Anderson.....	135, 058	Jan. 21, 1873	527	{ 170 171 }	{ 3 3 }	77
Blower, Compound.....	T. Shaw.....	140, 597	July 8, 1873	234	79	4	39
Blower, Fan.....	T. T. Prosser.....	145, 753	Dec. 23, 1873	653	214	4	674
Blower for gas-engine.....	J. H. Bean.....	140, 397	July 1, 1873	51	18	4	12
Blower, Piston.....	C. W. Isbell.....	137, 553	Apr. 8, 1873	257	79	3	389
Blower, Rotary.....	R. F. Knox.....	140, 509	July 1, 1873	143	49	4	20
Blower, Rotary.....	J. A. Svedberg.....	138, 448	Apr. 29, 1873	1, 094	346	3	487
Blowing-machine.....	J. G. Baker.....	145, 382	Dec. 9, 1873	307	103	4	623
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Drawing-board.							
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Ironing-board.							
Key-board.							
Kneading-board.							
Lap-board.							
Leather-board.							
Music blackboard.							
Organ reed-board.							
Stove-board.							
Straw board.							
Telegraph switch-board.							
Tray or show-board.							
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Boat-detaching apparatus.....	H. Ashford.....	142, 834	Sept. 16, 1873	461	156	4	301
Boat-detaching apparatus.....	C. A. Enell.....	138, 386	Apr. 29, 1873	1, 036	236	3	483
Boat-detaching apparatus.....	J. M. Kilner.....	138, 165	Apr. 22, 1873	812	258	3	457
Boat-detaching apparatus.....	F. M. Munger.....	138, 041	Apr. 22, 1873	710	224	3	448
Boat-detaching apparatus.....	S. Sneden.....	141, 470	Aug. 5, 1873	56	17	4	139
Boat detaching device.....	W. F. Morgan.....	142, 496	Sept. 2, 1873	159	52	4	254
Boats, Device for pitching.....	W. H. Richardson.....	135, 490	Feb. 4, 1873	89	28	3	134
Boats, Disengaging towing apparatus for.....	J. H. Wygant, C. Preston, and C. J. Westervelt.	143, 050	Sept. 23, 1873	650	222	4	327
Boats, Flexible vertically extensible attachment for.....	J. R. Adams.....	143, 052	Sept. 23, 1873	652	223	4	327
Boats, Means for chocking and securing.....	F. M. Howes.....	145, 873	Dec. 23, 1873	756	247	4	683
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Boats, Mechanism for towing.....	G. S. Olin.....	145, 813	Dec. 23, 1873	703	231	4	678
Boats, Paddle-mechanism for.....	C. Howard.....	135, 710	Feb. 11, 1873	305	96	3	164
Boats, Sectional folding frame for.....	W. M. Ducker.....	141, 860	Aug. 19, 1873	417	136	4	186
Bobbin.....	A. I. Earle.....	139, 558	June 3, 1873	99	33	3	617
Bobbin.....	T. G. McLaughlin.....	141, 575	Aug. 5, 1873	142	46	4	147
Bobbin-winding machine.....	W. Atkinson.....	142, 188	Aug. 26, 1873	725	240	4	221
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Bobbins, Machine for pointing the journals of.....	D. M. Church.....	138, 789	May 13, 1873	297	91	3	532
Bobbins, Machine for turning heads of.....	C. M. Spencer.....	137, 631	Apr. 8, 1873	320	100	3	394
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Boiler and other furnaces, Steam.....	C. Schemmuth.....	144, 241	Nov. 4, 1873	64	20	4	483
Boiler, Electrical protection for.....	A. T. Hay.....	140, 196	June 24, 1873	708	223	3	697
Boiler feed-regulator, Automatic.....	B. Brett.....	139, 762	June 10, 1873	306	95	3	649
Boiler-feeder.....	R. Rafael.....	142, 866	Sept. 16, 1873	486	166	4	304
Boiler-feeder, Steam.....	J. H. Blessing.....	134, 972	Jan. 21, 1873	447	143	3	71
Boiler, Feeder and filter for.....	J. G. Fulton.....	137, 357	Apr. 1, 1873	73	24	3	363
Boiler-feeder, Steam.....	A. Spencer, jr., and T. C. Spencer.....	137, 497	Apr. 1, 1873	202	61	3	373
Boiler-flue cleaner.....	J. Armbruster.....	144, 046	Oct. 28, 1873	623	206	4	459
Boiler-flue, Thimble for protecting.....	J. C. Farmer.....	138, 998	May 20, 1873	486	154	3	560
Boiler-flues, &c., Apparatus for cleaning.....	T. H. Donohue.....	142, 775	Sept. 16, 1873	415	140	4	298
Boiler for vaporizing volatile fluids.....	J. F. Haskins.....	145, 175	Dec. 2, 1873	128	42	4	595
Boiler for warming buildings.....	C. T. Hitchings.....	145, 654	Dec. 16, 1873	555	183	4	654
Boiler-furnace.....	S. A. Ford.....	141, 870	Aug. 19, 1873	436	142	4	187
Boiler-furnace.....	J. B. Root.....	141, 594	Aug. 5, 1873	157	50	4	148
Boiler-furnace.....	A. B. Smith.....	139, 522	June 3, 1873	66	23	3	614
Boiler-furnace.....	C. D. Smith.....	143, 305	Sept. 30, 1873	862	295	4	361
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Boiler-furnace, Oil-burning.....	F. Hungerford.....	142, 468	Sept. 2, 1873	132	43	4	253
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Boiler-furnace, Steam.....	C. H. Fox.....	135, 105	Jan. 21, 1873	560	182	3	80
Boiler-furnace, Steam.....	C. H. Fox.....	135, 106	Jan. 21, 1873	561	182	3	80
Boiler-furnace, Steam.....	S. Keyes.....	144, 393	Nov. 11, 1873	195	67	4	506
Boiler-furnace, Steam.....	A. C. Rand.....	138, 694	May 6, 1873	200	63	3	513
Boiler-furnace, Steam.....	C. D. Smith.....	138, 588	May 6, 1873	107	34	3	506
Boiler-furnace, Steam.....	U. B. Strubling.....	144, 296	Nov. 4, 1873	103	35	4	486
Boiler-furnace, Steam.....	J. Westerman.....	136, 948	Mar. 18, 1873	537	177	3	306
Boiler-heater and feeder.....	G. C. Williams.....	144, 937	Nov. 25, 1873	667	226	4	566
Boiler, Man-hole lid for.....	R. Tippet.....	137, 806	Apr. 15, 1873	489	153	3	421
Boiler-stand and heater.....	C. F. Hitchings.....	137, 448	Apr. 1, 1873	150	49	3	369
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Bolt and rivet machine.....	N. Beauregard.....	142, 193	Aug. 26, 1873	730	241	4	221
Bolt and rivet manufacture.....	W. Livingstone.....	137, 009	Mar. 18, 1873	589	196	3	311
Bolt and rod cutter.....	S. H. Preston.....	137, 956	Apr. 15, 1873	614	193	3	431
Bolt and rod cutter.....	H. Schmidt.....	142, 354	Sept. 2, 1873	29	11	4	244
Bolt and rod cutter.....	L. H. Smith.....	143, 645	Oct. 14, 1873	227	76	4	407
Bolt-cutter.....	L. J. Chapman.....	135, 887	Feb. 18, 1873	474	153	3	190
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Bolt-cutter.....	W. W. Hill.....	137, 076	Mar. 25, 1873	664	220	3	328
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Bolt-heading machine.....	C. Hall.....	141, 711	Aug. 12, 1873	276	90	4	165
Bolt-heading machine.....	J. O. Jones.....	141, 059	July 22, 1873	657	222	4	90
Bolt-machine.....	J. O. Jones.....	137, 688	Apr. 8, 1873	372	115	3	399
Bolt-machine.....	S. B. Wilkins and A. Marcellus.....	140, 103	June 17, 1873	608	192	3	681
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Bolts, Cutter-head for pointing ends of.....	O. C. Burdick.....	135, 520	Feb. 4, 1873	112	36	3	136
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Bolting-machine.....	H. Cabanes.....	144, 739	Nov. 18, 1873	491	167	4	541
Bone-black, Apparatus and process for revivifying.....	A. Lonsky.....	134, 686	Jan. 7, 1873	177	58	3	21
Bonnet-frame, Machine for stiffening netting for.....	P. C. Ritchie.....	135, 730	Feb. 11, 1873	318	101	3	165
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Book-case, Folding.....	E. Haskell.....	138, 022	Apr. 22, 1873	689	218	3	447
Book-case, Revolving.....	L. B. Pert.....	138, 279	Apr. 29, 1873	945	298	3	475
Book-clamp.....	W. A. Miller.....	145, 582	Dec. 16, 1873	496	163	4	649
Book-cover.....	A. H. Jocelyn.....	140, 275	June 24, 1873	773	244	3	703
Book-holding press.....	L. Heitkamp.....	143, 410	Oct. 7, 1873	11	4	4	381
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Book rounding and backing machine.....	R. F. Foster, T. S. Baylie, and J. Harbin.....	137, 192	Mar. 25, 1873	765	252 } 253 }	3	336
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Book-stand.....	J. B. Annin.....	140, 107	June 24, 1873	633	199	3	691
Book-support.....	R. B. Hindle.....	140, 369	July 1, 1873	29	10	4	10
Boom and raft rudder.....	L. W. Pond.....	138, 760	May 13, 1873	272	84	3	529
Booms, Elastic antifriction attachment for vessels.....	H. Gregory, jr.....	144, 975	Nov. 25, 1873	699	236	4	569
Boot.....	L. H. Farnsworth.....	143, 001	Sept. 23, 1873	606	206	4	324

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Boot	I. Hall	139,385	May 27, 1873	843	269	3	597
Boot	G. S. Lee	137,781	Apr. 15, 1873	468	146	3	419
Boot	G. C. Parker	145,589	Dec. 16, 1873	502	165	4	650
Boot	P. West and G. S. Lee	142,424	Sept. 2, 1873	89	29	4	249
Boot and shoe	H. Rogers and L. Felton	135,591	Feb. 4, 1873	188	58	3	142
Boot and shoe bottom, Machine for molding	S. W. Baldwin	139,354	May 27, 1873	114	260	3	595
Boot and shoe channeling machine	A. E. Chickering and H. B. Tuttle	141,693	Aug. 12, 1873	263	85	4	164
Boot and shoe channeling machine	C. S. Dunbrack	143,561	Oct. 14, 1873	155	52	4	402
Boot and shoe channeling machine	B. H. Hadley	143,237	Sept. 30, 1873	803	277	4	356
Boot and shoe, Construction of	M. M. Wheeler	136,293	Feb. 25, 1873	834	270	3	230
Boot and shoe counters, Mechanism for making	E. Andrews	140,569	July 8, 1873	208	69, 70	4	36
Boot and shoe crimper	C. Glantz	137,543	Apr. 8, 1873	247	76	3	388
Boot and shoe fastening	G. H. Ward	136,111	Feb. 18, 1873	663	216	3	205
Boot and shoe gore, Elastic material for	C. Winslow	136,119	Feb. 18, 1873	669	219	3	205
Boot and shoe leather-crimping machine	S. W. Jamison	139,717	June 10, 1873	259	82	3	646
Boot and shoe, Machine for making shank-piece for	C. H. D. D., and F. M. Blake	174,584	Jan. 7, 1873	80	25	3	13
Boot and shoe nailing-machine, Driver for	A. S. Libby	143,699	Oct. 14, 1873	279	92	4	411
Boot and shoe rivet	P. West	135,051	Jan. 21, 1873	522	169	3	77
Boot and shoe shank	G. Goodyear	136,991	Mar. 18, 1873	572	191	3	310
Boot and shoe shank-burnishing machine	A. C. Carey	142,990	Sept. 23, 1873	597	203	4	323
Boot and shoe shave	D. Harrington	138,328	Apr. 29, 1873	992	312	3	479
Boot and shoe shipping and show case	M. Buhler	140,007	June 17, 1873	518	165	3	674
Boot and shoe stretcher	J. Lyons	142,710	Sept. 9, 1873	345	116	4	282
Boot and shoe tacking-machine	D. M. Smith	143,388	Sept. 30, 1873	938	318	4	367
Boot and shoe tip	F. M. Rhineland	145,590	Dec. 16, 1873	502	165	4	650
Boot and shoe tip, Detachable	M. R. Hanley	139,060	May 20, 1873	541	170	3	565
Boot and shoe tree and stretcher	T. R. Evans	141,550	Aug. 5, 1873	122	38	4	145
Boot and shoe uppers, Machine for crimping	A. Knowlton	142,402	Sept. 2, 1873	73	24	4	248
Boot-blackening kit	S. Van Gilder	140,447	July 1, 1873	86	30	4	15
Boot-brushing apparatus	M. Beck and C. Schneidt	141,196	July 29, 1873	799	261	4	109
Boot-crimping block	H. Bordner and D. Sullivan	142,369	Sept. 2, 1873	42	15	4	245
Boot, Gaiter	C. Hersome	145,801	Dec. 23, 1873	694	227	4	678
Boot, Half	L. U. Williams	142,312	Aug. 26, 1873	827	274	4	229
Boot-jack	H. Arndt	140,179	June 24, 1873	695	218	3	696
Boot-jack	F. Dorsett, sr	143,408	Oct. 7, 1873	10	3	4	381
Boot-legs, Mode of siding	G. C. Parker	140,726	July 8, 1873	339	115	4	47
Boot-lining	H. White	142,307	Aug. 26, 1873	823	273	4	229
Boot, Moccasin	E. A. Buck	139,234	May 27, 1873	717	226	3	587
Boot or bootee	T. P. Mitchell	145,117	Dec. 2, 1873	72	23	4	591
Boot, Plowmans'	A. G. Walker and S. Brown	142,061	Aug. 19, 1873	603	199	4	201
Boot-seams, Machine for rubbing and rolling	A. Thompson	138,713	May 6, 1873	220	69	3	515
Boot-stretcher	D. Harris	139,671	June 10, 1873	212	69	3	642
Boot-tree	T. Branigan	144,312	Nov. 4, 1873	114	38, 39	4	488
Boot-tree	O. V. Elliott	140,490	July 1, 1873	125	43	4	18
Boots and shoes, Apparatus for molding box-toes for	D. H. Packard	143,926	Oct. 21, 1873	494	167	4	439
Boots and shoes, Edge-protecting welt for	J. Green	143,623	Oct. 14, 1873	209	70	4	406
Boots, &c., Channel-opener for	F. Guscelli	138,883	May 13, 1873	381	119	3	539
Boots, &c., Crimping-apparatus for	M. R. Marcell	145,995	Nov. 25, 1873	718	242	4	571
Boots and shoes, Jack for nailing, &c.	J. G. Ross	143,786	Oct. 21, 1873	378	125	4	429
Boots and shoes, Machine for buffing	G. C. Hawkins	145,501	Dec. 16, 1873	418	137	4	643
Boots and shoes, Machine for crimping the uppers of	C. Glantz	145,940	Dec. 16, 1873	839	273	4	700
Boots and shoes, Machinery for making wood shanks for	W. N. Sprague	145,024	Nov. 25, 1873	742	250	4	573
Boots and shoes, Manufacture of	J. Boyle	141,257	July 29, 1873	861	281	4	114
Boots, Manufacture of	W. H. Ferguson	143,687	Oct. 14, 1873	269	88	4	410
Boots and shoes, Manufacture of	J. L. Joyce	141,357	July 29, 1873	959	312	4	122
Boots and shoes, Manufacture of	C. A. Keith	141,797	Aug. 12, 1873	356	117	4	172
Boots and shoes, Manufacture of	P. Ware, jr.	142,538	Sept. 2, 1873	194	63	4	257
Boots and shoes, Nailing	L. R. Blake and A. S. Libby	140,400	July 1, 1873	53	19	4	12
Boots and shoes, Spring-shank for	W. J. Neill	145,963	Dec. 30, 1873	860	279	4	701
Boots, &c., Sample-holder for displaying	J. Closs	139,044	May 20, 1873	522	165	3	563
Boots, &c., Shank for	F. P. Buren	138,851	May 13, 1873	353	110	3	536
Boring and drilling machine	J. J. Sheridan	142,416	Sept. 2, 1873	82	27	4	249
Boring-bars, Tool-holder and cutter-head for	J. Wheelock	144,583	Nov. 11, 1873	355	120	4	518
Boring-bit	S. Hipkins, jr.	140,370	July 1, 1873	29	10	4	10
Boring-machine	I. Cory	135,693	Feb. 11, 1873	290	92	3	162
Boring-machine	H. Longwell	139,901	June 17, 1873	438	136	3	667
Boring-machine	R. O. Moorhouse and S. L. Wiegand	141,657	Aug. 12, 1873	232	73	4	162
Boring-machine	H. Pitcher	138,927	May 13, 1873	414	130	3	542
Boring-machine	B. F. Rea, M. Pyke, and D. M. Renne	144,139	Oct. 28, 1873	700	232	4	466
Boring-machine	J. Strickler	142,296	Aug. 26, 1873	815	270	4	228
Boring-machine, Earth	W. H. Salyer	140,595	July 8, 1873	231	78	4	38
Boring-mill	F. E. Hahn	142,694	Sept. 9, 1873	331	111	4	281
Boring-tool, Expanding	J. K. Kacerovsky	136,736	Mar. 11, 1873	348	115	3	282
Bosom and collar, Combined over	I. T. Dyer	144,267	Nov. 4, 1873	83	27	4	485
Bosom-pad	H. M. Millar	143,921	Oct. 21, 1873	491	165	4	438
Bosom-pad	C. A. Phillips	135,936	Feb. 18, 1873	512	167	3	193
Bosoms, collars, and similar articles of apparel	A. Johnson	136,247	Feb. 25, 1873	790	256	3	227
Bottle	V. H. Lyon	139,905	June 17, 1873	440	137	3	667
Bottle and bottle-stopper	H. Naylor	136,534	Mar. 4, 1873	164	52	3	258
Bottle, Attaching cork-retaining bale to	L. B. Flanders	139,886	June 17, 1873	424	132	3	666
Bottle, Box for holding and transporting	J. Matthews	139,722	June 10, 1873	266	83	3	646
Bottle cap and spoon, Mustard	H. J. White	141,844	Aug. 12, 1873	396	129	4	175
Bottle cap or cover	J. G. Chillingworth	140,346	July 1, 1873	12	4	4	9
Bottle-casing	J. Dugan	142,685	Sept. 9, 1873	325	108	4	280
Bottle, Caster	A. Weber	140,564	July 1, 1873	191	64	4	24
Bottle, Caster	do	145,138	Dec. 2, 1873	95	31	4	593
Bottle, &c., closing device	J. Matthews	137,941	Apr. 15, 1873	601	189	3	430
Bottle-corking apparatus	A. C. Jordan	142,240	Aug. 26, 1873	771	253	4	224
Bottle-corking machine	J. Armstrong	143,606	Oct. 14, 1873	193	65	4	405
Bottle, Cosmetic	M. H. Huntington	143,627	Oct. 14, 1873	212	71	4	406
Bottle-cover	W. Bourguignon	145,484	Dec. 16, 1873	405	133	4	642
Bottle-filler	J. Matthews	138,421	Apr. 29, 1873	1,073	338	3	485
Bottle-filling apparatus	F. Schlich and A. Feyh	138,534	May 6, 1873	60	20	3	502

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Bottle, Frame for making straw envelope for.....	W. F. Tillinghast	136, 394	Mar. 4, 1873	38	13	3	248
Bottle, Glass.....	J. Borden and J. L. Trimble.....	144, 885	Nov. 25, 1873	628	213	4	563
Bottle, Liquid-effervescing	H. Codd	138, 230	Apr. 29, 1873	896	283	3	472
Bottle-mold, Glass	C. D. Fox	138, 323	Apr. 29, 1873	988	311	3	479
Bottle, Nursing	W. Hobson	139, 958	June 17, 1873	480	151	3	671
Bottle, Nursing	T. J. Mayall.....	140, 518	July 1, 1873	151	51	4	20
Bottle, Nursing	G. R. White	138, 219	Apr. 22, 1873	864	274	3	461
Bottle-protector	O. Fitzgerald	144, 082	Oct. 28, 1873	653	215	4	462
Bottle, Sample	S. H. Gilman	143, 753	Oct. 21, 1873	350	117	4	427
Bottle-stand, Wire	G. D. Dudley	145, 284	Dec. 9, 1873	227	76	4	616
Bottle-stopper	D. M. Cummings.....	135, 267	Jan. 28, 1873	727	232	3	106
Bottle-stopper	A. De Mestre	136, 045	Feb. 18, 1873	602	198	3	201
Bottle-stopper	F. Kutscher	136, 326	Feb. 25, 1873	861	277	3	232
Bottle-stopper	H. S. Leshner	144, 777	Nov. 18, 1873	525	178	4	544
Bottle-stopper	T. J. Mayall.....	140, 517	July 1, 1873	150	51	4	20
Bottle-stopper	H. F. Reiner	136, 095	Feb. 18, 1873	648	212	3	204
Bottle-stopper	L. Rhoades	141, 950	Aug. 19, 1873	500	165	4	193
Bottle-stopper for volatile salts	A. Hebbard	134, 600	Jan. 7, 1873	98	31	3	15
Bottle-stopper, Inflammable liquid.....	L. G. Chaput	141, 628	Aug. 12, 1873	208	66	4	160
Bottle stopper, Smelling	E. F. Marble and R. W. Glidden	137, 938	Apr. 15, 1873	599	188	3	430
Bottle-washer.....	W. Dick	136, 423	Mar. 4, 1873	59	21	3	250
Bottle-washing apparatus.....	F. Schlich and A. Feyh	138, 046	Apr. 22, 1873	715	226	3	449
Bottle-wrapper	A. E. Francis	139, 308	May 27, 1873	784	249	3	592
Bottles, Tool for holding glass	T. B. Hewitt	145, 945	Dec. 16, 1873	845	275	4	700
Bottles, Valvular stopper for.....	C. Patterson	146, 018	Dec. 30, 1873	907	294	4	705
Bottling liquids.....	J. Klee	141, 360	July 29, 1873	961	313	4	122
Bouquet-holder	A. F. Ransom	139, 477	June 3, 1873	30	10	3	611
Bowl, Water	B. Brower	141, 421	Aug. 5, 1873	11	3	4	136
Bowls, Making footed glass	E. G. Cate	144, 061	Oct. 28, 1873	638	210	4	460
Box:							
<i>See</i> Advertising-box.							
Axle-box.							
Ballot-box.							
Blacking-box.							
Cartridge-box.							
Check-box.							
Cigar-box.							
Dice-box.							
Dredge-box.							
Fare-box.							
Feed-box.							
File-box.							
Fire-box.							
Fire-alarm box.							
Fruit-box.							
Journal-box.							
Letter-box.							
Lunch-box.							
Match-box.							
Miter-box.							
Music-box.							
Packing-box.							
Paper-box.							
Porters' box.							
Post-office box.							
Pump-box.							
Resin-box.							
Sheet-metal box.							
Shuttle-box.							
Spice-box.							
Spool-box.							
Tobacco-box.							
Toy money-box.							
Trunk and hat box.							
Work-box.							
Box	J. S. Lash	145, 663	Dec. 16, 1873	564	185	4	655
Box.....	E. C. Patterson.....	137, 385	Apr. 1, 1873	93	30	3	364
Box, &c, Eccentric fastening for.....	W. Youngblood	135, 873	Feb. 11, 1873	444	144	3	174
Box-former	G. W. Swan	143, 103	Sept. 23, 1873	689	237	4	330
Box-lifter	B. H. Smith	139, 029	May 20, 1873	510	161	3	562
Box-making machine	G. W. Swan	142, 297	Aug. 26, 1873	816	270	4	228
Box, Metallic corner-shield for.....	J. F. Sargent	140, 080	June 17, 1873	586	186	3	680
Box-opener	W. J. Hinden.....	144, 454	Nov. 11, 1873	244	83	4	510
Box-opener	L. Mills	138, 177	Apr. 22, 1873	824	262	3	458
Box-plaiting machine	O. M. Chamberlain	136, 362	Mar. 4, 1873	7	3	3	246
Box-scraper.....	A. Tester	140, 857	July 15, 1873	457	155	4	65
Box-stuff, Machine for cutting	C. W. Royse	138, 584	May 6, 1873	104	33	3	506
Brace:							
<i>See</i> Bit-brace.							
Chair-brace.							
Shoulder-brace.							
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Brace-coupling, Adjustable	C. M. Hall	137, 609	Apr. 8, 1873	304	94	3	393
Brace-drill	G. Gibbs	136, 830	Mar. 18, 1873	440	146	3	299
Bracelet	T. L. Cornell	134, 735	Jan. 14, 1873	230	74	3	39
Bracelet	A. Fobes	145, 164	Dec. 2, 1873	117	38	4	594
Bracelet	J. W. Grant and C. H. Cook.....	139, 311	May 27, 1873	786	250	3	592
Bracelet	S. W. Grant	139, 888	June 17, 1873	425	132	3	666
Bracelet	H. A. Williams	143, 109	Sept. 23, 1873	695	238	4	331
Bracelet-fastening	S. Cottle	145, 788	Dec. 23, 1873	684	224	4	677
Bracelet-fastening	F. Kursh	134, 681	Jan. 7, 1873	173	57	3	20
Bracelet-fastening	B. Ranger and J. B. Smiley.....	143, 382	Sept. 30, 1873	934	316	4	366
Bracelet-joint, Manufacture of	J. B. Black	139, 361	May 27, 1873	820	262	3	595

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Flower-pot bracket.							
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Hanging-bracket.							
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Metallic bracket.							
Pump-bracket.							
Shelving-bracket.							
Shingling-bracket.							
Bracket.....	L. Benecke.....	138,367	Apr. 29, 1873	1,022	322	3	482
Brake:							
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Car-brake.							
Elevator-brake.							
Hemp-brake.							
Railway-brake.							
Sewing-machine brake.							
Sled-brake.							
Sleigh-brake.							
Spinning-mule brake.							
Steam-brake.							
Steam and air brake.							
Wagon-brake.							
Brake-coupling, Steam-power.....	G. Westinghouse, jr.....	136,396	Mar. 4, 1873	39	14	3	248
Brake-coupling, Steam-power.....	G. Westinghouse, jr.....	136,631	Mar. 11, 1873	262	88	3	275
Brake-mechanism.....	O. Grüniger.....	140,700	July 8, 1873	318	108	4	45
Brake-reaction movement.....	H. B. Martin.....	140,057	June 17, 1873	567	179	3	678
Brake, Shoe.....	J. W. Moffitt.....	138,514	May 6, 1873	43	15	3	501
Brake-shoe, Wagon.....	H. Seitz.....	139,086	May 20, 1873	566	177	3	567
Bran-duster.....	J. T. McNally.....	137,228	Mar. 25, 1873	798	263	3	338
Bran-duster, Feeding-screen for.....	G. S. Cooper.....	135,085	Jan. 21, 1873	545	177	3	79
Brass, Furnace for melting.....	I. D. Bush.....	135,967	Feb. 18, 1873	536	177	3	195
Bread-raising apparatus.....	J. Sutton.....	137,974	Apr. 15, 1873	630	198	3	433
Bread-worker.....	J. H. Balderston.....	135,959	Feb. 18, 1873	529	174	3	195
Breakwater, Construction of.....	D. Cunningham.....	137,659	Apr. 8, 1873	346	107	3	397
Breast-cup.....	A. M. Knapp.....	141,005	July 22, 1873	614	207	4	87
Breast-pin tongue.....	L. H. Sondheim.....	137,154	Mar. 25, 1873	726	241	3	333
Brewing beer and ale.....	L. Pasteur.....	135,245	Jan. 28, 1873	710	227	3	105
Brick.....	J. Dennen.....	142,087	Aug. 26, 1873	643	.....	4	214
Brick and tile machine.....	G. Baldwin.....	136,481	Mar. 4, 1873	111	37	3	254
Brick-kiln.....	D. Blocher.....	140,343	July 1, 1873	8	3	4	8
Brick kiln.....	A. W. M. Maass.....	138,905	May 13, 1873	396	125	3	540
Brick-kiln.....	H. Tugby.....	141,404	July 29, 1873	1,002	325	4	125
Brick-kiln.....	P. J. Walsh and W. J. Taylor.....	136,568	Mar. 4, 1873	194	64	3	261
Brick-machine.....	R. T. Barton.....	137,122	Mar. 25, 1873	702	233	3	331
Brick-machine.....	G. C. Bovey.....	138,731	May 13, 1873	247	77	3	527
Brick-machine.....	J. D. Bush.....	143,806	Oct. 21, 1873	397	{ 131 132 }	4	430
Brick-machine.....	W. Cole.....	141,855	Aug. 19, 1873	413	134	4	186
Brick-machine.....	P. K. Dederick.....	142,375	Sept. 2, 1873	47	17	4	246
Brick-machine.....	A. Elliot and J. O. Woodward.....	143,972	Oct. 28, 1873	556	185	4	454
Brick-machine.....	D. W. Glendinning.....	143,569	Oct. 14, 1873	161	54	4	402
Brick-machine.....	D. Goldthorp and T. Hield.....	145,169	Dec. 2, 1873	120	39, 40	4	595
Brick-machine.....	J. Hotchkiss and P. N. Woliston.....	138,251	Apr. 29, 1873	919	{ 289 290 }	3	473
Brick-machine.....	G. O. Houck and C. E. Sawyer.....	139,894	June 17, 1873	430	134	3	666
Brick-machine.....	E. R. Hubbard.....	134,672	Jan. 7, 1873	164	54	3	19
Brick-machine.....	H. Hughes.....	138,651	May 6, 1873	161	52	3	511
Brick-machine.....	D. J. Hunter.....	141,646	Aug. 12, 1873	221	70	4	161
Brick-machine.....	D. J. Irwin.....	136,520	Mar. 4, 1873	151	48	3	257
Brick-machine.....	D. J. Irwin and H. S. Langdon.....	141,560	Aug. 5, 1873	131	41	4	146
Brick-machine.....	S. Martin.....	137,460	Apr. 1, 1873	162	51	3	370
Brick-machine.....	H. Martin.....	138,754	May 13, 1873	268	83	3	529
Brick-machine.....	J. N. McLean and J. Bennor.....	142,114	Aug. 26, 1873	664	219	4	216
Brick-machine.....	J. W. Metz.....	135,353	Jan. 28, 1873	802	259	3	112
Brick-machine.....	J. M. Mitchell.....	145,358	Dec. 9, 1873	289	97	4	621
Brick-machine.....	C. H. Murray.....	140,296	June 24, 1873	790	251	3	704
Brick-machine.....	L. Patterson.....	145,444	Dec. 9, 1873	361	121	4	626
Brick-machine.....	J. S. Thomas.....	140,742	July 8, 1873	356	120	4	48
Brick-machine, Die or mouth for.....	C. H. Murray.....	140,297	June 24, 1873	792	251	3	705
Brick, Method of burning.....	T. Billesbach.....	144,652	Nov. 18, 1873	424	142	4	535
Brick-press, mold, or box.....	J. McKenna.....	141,942	Aug. 19, 1873	493	163	4	192
Brick-repressing machine.....	J. K. Caldwell.....	139,113	May 20, 1873	588	184	3	568
Brick, Reversible curb.....	E. Linson.....	134,994	Jan. 21, 1873	468	150	3	73
Brick, stove-lining, &c., Composition for fire.....	E. H. Richter.....	145,448	Dec. 9, 1873	364	.....	4	627
Brick-yard shed.....	R. A. Smith.....	141,520	Aug. 5, 1873	97	30	4	143
Bricks by hydraulic pressure, Machine for molding } and pressing.	E. Rogers.....	143,188	Sept. 23, 1873	754	{ 260 261 }	4	336
Bricks for pavement, Treating.....	W. H. De Valin.....	144,749	Nov. 18, 1873	501	.....	4	542
Bricklayers' pointer.....	J. S. Merriken.....	138,911	May 13, 1873	401	126	3	540
Bridge.....	B. F. Davis.....	143,125	Sept. 23, 1873	706	242	4	332
Bridge.....	J. R. Durfee.....	142,776	Sept. 16, 1873	416	140	4	298
Bridge.....	J. B. Eads.....	142,378	Sept. 2, 1873	50	17	4	246
Bridge.....	J. B. Eads.....	144,519	Nov. 11, 1873	298	100	4	514
Bridge.....	J. Gates.....	135,705	Feb. 11, 1873	300	95	3	163
Bridge.....	J. M. Goodwin.....	142,785	Sept. 16, 1873	423	143	4	298
Bridge.....	H. Pettit.....	136,177	Feb. 25, 1873	737	237	3	223
Bridge.....	A. Reiling.....	145,685	Dec. 16, 1873	583	191	4	657
Bridge.....	J. Valleley.....	146,034	Dec. 30, 1873	918	297	4	706
Bridge, Chain suspension.....	E. W. and E. W. Serrill, jr.....	143,788	Oct. 21, 1873	380	126	4	429
Bridge-column.....	J. Zellweger.....	145,545	Dec. 16, 1873	468	153	4	647
Bridge, Constructing.....	T. C. Clarke.....	140,888	July 15, 1873	484	163	4	67
Bridge, Construction of.....	S. B. B. Nowlan.....	136,935	Mar. 18, 1873	526	{ 173 174 }	3	306

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Bridge, Ferry.....	C. J. Atkins.....	141, 911	Aug. 19, 1873	470	154	4	190
Bridge-foundation, Iron.....	J. B. Eads.....	142, 382	Sept. 2, 1873	57	19	4	246
Bridge-girder.....	J. W. Evans.....	144, 751	Nov. 18, 1873	502	170	4	542
Bridge, Iron.....	C. Bender, C. H. Latrobe, and C. H. Smith.	141, 310	July 29, 1873	906	297	4	118
Bridge, Iron.....	W. B. Cooper.....	135, 970	Feb. 18, 1873	538	178	3	196
Bridge, Iron.....	J. B. Eads.....	142, 379	Sept. 2, 1873	51	18	4	246
Bridge, Iron.....	J. B. Eads.....	142, 380	Sept. 2, 1873	53	18	4	246
Bridge, Iron.....	J. B. Eads.....	142, 381	Sept. 2, 1873	55	18	4	246
Bridge, Iron.....	D. Hammond, M. Adler, and J. Abbott.	135, 802	Feb. 11, 1873	384	124	3	169
Bridge, Iron.....	P. Johnson.....	144, 766	Nov. 18, 1873	516	175	4	543
Bridge, Iron.....	J. D. Pierce.....	141, 458	Aug. 5, 1873	44	14	4	138
Bridge, Iron.....	W. Sellers.....	136, 389	Mar. 4, 1873	33	12	3	248
Bridge, Lifting.....	S. Swartz.....	136, 278	Feb. 25, 1873	822	265	3	229
Bridge, Pivot.....	T. C. Clarke, A. Bonzano, and J. Griffen.	135, 776	Feb. 11, 1873	357	115	3	168
Bridge-railing, Balusters for iron.....	S. Sellers and M. M. Manly.....	138, 049	Apr. 22, 1873	719	226	3	449
Bridge safety-switch and signal, Draw.....	E. H. Tobey.....	140, 319	June 24, 1873	813	257	3	706
Bridge-truss.....	J. Anderson.....	136, 951	Mar. 18, 1873	539	178	3	307
Bridge-truss.....	A. Bannister.....	141, 026	July 22, 1873	632	213	4	88
Bridge-truss.....	D. C. Bower.....	140, 181	June 24, 1873	696	219	3	696
Bridge-truss.....	T. C. Clarke, A. Bonzano, and J. Griffen.	140, 471	July 1, 1873	109	37	4	17
Bridge-truss.....	H. J. Hunter and J. Rice.....	141, 056	July 22, 1873	654	221	4	90
Bridge-truss.....	F. Schwatka.....	141, 293	July 29, 1873	890	292	4	117
Bridge-truss frame.....	J. H. Linville.....	145, 114	Dec. 2, 1873	67	22	4	591
Bridge-truss, Wooden.....	T. W. Pratt.....	137, 482	Apr. 1, 1873	183	58	3	372
Bridle-bit.....	D. H. Carpenter.....	140, 010	June 17, 1873	520	165	3	674
Bridle-bit.....	J. M. Fabré.....	140, 023	June 17, 1873	535	169	3	675
Bridle-bit.....	C. L. Ginkinger.....	137, 913	Apr. 15, 1873	579	182	3	428
Bridle-bit.....	J. Letchworth.....	134, 684	Jan. 7, 1873	176	57	3	20
Bridle-bit.....	B. L. Rowley.....	136, 767	Mar. 11, 1873	374	124	3	284
Bridle-bit.....	Vincenzo, Count Di Tergolina.....	141, 334	July 29, 1873	930	303	4	120
Bridle-blind.....	J. Patterson, jr.....	145, 233	Dec. 2, 1873	175	60	4	599
Bridle for horses.....	J. Muller.....	145, 892	Dec. 23, 1873	773	253	4	684
Bridles, Machine for punching, splitting, and creasing.....	J. B. Gathright.....	145, 292	Dec. 9, 1873	232	78	4	616
Bridle, Safety.....	J. M. Elder and P. A. Bishop.....	138, 872	May 13, 1873	371	115	3	538
Broaching-machine.....	A. P. Stephens.....	141, 091	July 22, 1873	689	232	4	93
Bromine, Apparatus for the manufacture of.....	D. C. Turner.....	137, 512	Apr. 1, 1873	215	65	3	374
Bromine from bitters, Apparatus for producing.....	G. Leyer and J. A. Winter.....	137, 222	Mar. 25, 1873	793	262	3	338
Bronzing-machine.....	L. G. Chaput and W. and J. Braidwood.	144, 741	Nov. 18, 1873	493	167	4	541
Bronzing-pad.....	L. G. Chaput.....	143, 880	Oct. 21, 1873	459	154	4	436
Broom.....	J. D. Bell.....	140, 180	June 24, 1873	696	218	3	696
Broom.....	C. Boeckh.....	136, 694	Mar. 11, 1873	312	103	3	279
Broom.....	F. Reese.....	137, 721	Apr. 8, 1873	406	125	3	401
Broom.....	S. Standish.....	136, 273	Feb. 25, 1873	818	264	3	229
Broom-bag.....	E. D. Bronson.....	136, 026	Feb. 18, 1873	587	193	3	199
Broom-corn duster.....	J. L. Stranahan.....	137, 805	Apr. 15, 1873	489	153	3	421
Broom-handles, &c., Clamp for splicing.....	C. L. W. Baker.....	146, 041	Dec. 30, 1873	923	299	4	707
Broom-handles, moldings, &c., Apparatus for painting or coating.....	S. A. Shepard.....	138, 767	May 13, 1873	279	87	3	530
Broom-hanger.....	M. A. Clifford.....	143, 063	Sept. 23, 1873	661	226	4	328
Broom-head.....	B. C. Cook.....	135, 525	Feb. 4, 1873	120	38	3	137
Broom-head.....	D. J. Owen and J. G. Brydges.....	135, 661	Feb. 11, 1873	258	82	3	160
Broom-protector.....	G. Hunt.....	137, 774	Apr. 15, 1873	463	145	3	419
Brush.....	C. L. W. Baker.....	144, 496	Nov. 11, 1873	280	95	4	513
Brush.....	C. W. Palmer.....	139, 474	June 3, 1873	27	8	3	611
Brush.....	P. Wagner.....	138, 213	Apr. 22, 1873	858	272	3	460
Brush.....	J. S. White.....	135, 053	Jan. 21, 1873	524	169	3	77
Brush and mop holder.....	I. Smith.....	138, 946	May 13, 1873	429	135	3	543
Brush, Blacking.....	W. S. Fickett.....	141, 638	Aug. 12, 1873	215	68	4	160
Brush, Blacking.....	C. W. Maguire.....	137, 376	Apr. 1, 1873	87	28	3	364
Brush, Blacking.....	F. W. C. Von Kessler and A. F. Medenwald.	138, 353	Apr. 29, 1873	1, 011	318	3	481
Brush, Coiled-wire.....	J. B. Christoffel.....	138, 317	Apr. 29, 1873	982	308	3	478
Brush-ferrule.....	W. F. Lorey.....	136, 605	Mar. 11, 1873	238	81	3	274
Brush, Fly.....	J. A. Lyle.....	144, 779	Nov. 18, 1873	527	179	4	544
Brush, Fountain.....	R. Lapham.....	145, 301	Dec. 9, 1873	239	81	4	617
Brush-handle.....	R. S. Craig.....	135, 090	Jan. 21, 1873	548	178	3	79
Brush-handle, Lather.....	W. H. Miles, jr.....	144, 553	Nov. 11, 1873	330	111	4	516
Brush-handles, Machine for driving.....	J. Ames, jr.....	142, 137	Aug. 26, 1873	685	225	4	217
Brush-handles, Machine for driving.....	P. Peartree.....	138, 344	Apr. 29, 1873	1, 003	316	3	480
Brush-holder.....	C. L. W. Baker.....	145, 479	Dec. 16, 1873	401	132	4	642
Brush, Horse.....	R. Dickson.....	137, 536	Apr. 8, 1873	242	74	3	388
Brush-machine.....	E. F. Bradley.....	137, 411	Apr. 1, 1873	117	38, 39	3	366
Brush-machine.....	M. Dillon.....	135, 634	Feb. 11, 1873	236	74	3	158
Brush-machine.....	E. A. Hill.....	142, 913	Sept. 16, 1873	524	178	4	307
Brush-machine.....	E. D. Van Horn and C. N. Farr.....	138, 545	May 6, 1873	68	23	3	503
Brush, Marking.....	F. W. Wentworth.....	140, 228	June 24, 1873	732	231	3	699
Brush, mop, and wringer, Combined scrubbing.....	J. D. Smith.....	140, 655	July 8, 1873	281	95	4	42
Brush, Paint.....	G. H. Chinnock.....	138, 787	May 13, 1873	296	91	3	531
Brush, Paint.....	M. Dillon.....	135, 635	Feb. 11, 1873	237	74	3	158
Brush, Paint.....	J. J. Gorman.....	134, 745	Jan. 14, 1873	238	77	3	40
Brush, Paint.....	J. J. Gorman.....	139, 887	June 17, 1873	424	132	3	666
Brush, Paint.....	S. Standish.....	140, 314	June 24, 1873	806	256	3	706
Brush, Paint.....	A. S. Thompson.....	141, 522	Aug. 5, 1873	98	30	4	143
Brush, Paint.....	P. Wagner.....	136, 288	Feb. 25, 1873	831	268	3	230
Brush, Paper-hanger's.....	J. M. McComb.....	144, 999	Nov. 25, 1873	721	243	4	571
Brush, Rotary.....	G. Carlisle.....	143, 666	Oct. 14, 1873	244	82	4	409
Brush, Scrubbing.....	C. Herold.....	143, 695	Oct. 14, 1873	276	91	4	411
Brush, Shoe.....	G. Wale.....	136, 289	Feb. 25, 1873	832	269	3	230

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Brush-socket	P. Wagner	137,515	Apr. 1, 1873	217	66	3	374
Brush, Tooth	J. and W. O'Donoghue	140,429	July 1, 1873	72	26	4	14
Brush-woods, Machine for shaping	J. Ames, jr	145,546	Dec. 16, 1873	469	153	4	647
Brushes, Manufacture of	A. C. Estabrook	135,415	Feb. 4, 1873	20	6	3	129
Bucket	R. T. Brown	143,959	Oct. 28, 1873	546	181	4	453
Bucket	J. V. Deuell	136,140	Feb. 25, 1873	708	223	3	220
Bucket, Butter	J. Gilberts and M. Harris	142,456	Sept. 2, 1873	119	38	4	252
Bucket, Dinner	F. E. Heinig	143,241	Sept. 30, 1873	808	277	4	356
Bucket, Sheet-metal	W. Austin	141,748	Aug. 12, 1873	307	100	4	168
Bucket, Well	C. F. Stites	140,439	July 1, 1873	80	28	4	15
Buckle	J. M. Borchardt	142,076	Aug. 26, 1873	632	208	4	213
Buckle	S. H. Doughty	138,487	May 6, 1873	17	6	3	499
Buckle	W. Parsons	142,721	Sept. 9, 1873	353	119	4	282
Buckle	A. B. Shaw	141,729	Aug. 12, 1873	290	95	4	166
Buckle, Breeching-loop	J. H. McGarrah	135,238	Jan. 28, 1873	702	225	3	104
Buckle-fastening	F. H. Gladding	136,151	Feb. 25, 1873	716	231	3	221
Buckle, Harness	J. Allbee	145,270	Dec. 9, 1873	214	73	4	615
Buckle, Harness	K. Frazer	142,907	Sept. 16, 1873	519	177	4	306
Buckle, Harness	C. C. Lee	139,253	May 27, 1873	733	232	3	588
Buckle, Harness	J. McLean	137,558	Apr. 8, 1873	261	80	3	389
Buckle, Harness	O. B. North	143,180	Sept. 23, 1873	746	258	4	335
Buckle, Harness	J. W. Ropp and R. C. Kibby	136,766	Mar. 11, 1873	373	123	3	284
Buckle, Harness	J. L. Selleck	138,291	Apr. 29, 1873	957	301	3	476
Buckle, Harness-trace	H. H. Hartzell	143,284	Sept. 30, 1873	843	290	4	359
Buckle, Harness-tug	C. W. Adams	135,744	Feb. 11, 1873	330	106	3	165
Buckle, Harness-tug	F. Seifert	135,601	Feb. 4, 1873	199	61	3	143
Buckle, Suspender	S. Hamm	143,144	Sept. 23, 1873	719	247	4	333
Buckle, Trace	C. K. Brayton and J. Baugh	141,108	July 22, 1873	705	236	4	94
Buckle, Trace	T. Brownlee	140,463	July 1, 1873	102	34	4	16
Buckle, Trace	M. B. DeSilva and G. T. Benjamin	135,093	Jan. 21, 1873	550	179	3	79
Buckle, Trace	J. Kennedy	141,565	Aug. 5, 1873	136	43	4	146
Buckle, Turn	T. Gaillard	136,910	Mar. 18, 1873	505	167	3	304
Buffet-table	W. H. Tufts	144,424	Nov. 11, 1873	224	74-75	4	508
Buffing-machine	W. W. Messer, jr	137,465	Apr. 1, 1873	167	53	3	370
Buffing-wheel	E. and W. Dixon	145,492	Dec. 16, 1873	411	135	4	642
Bug-extinator, Potato	C. Cole	144,065	Oct. 28, 1873	641	211	4	461
Buggy	C. T. Stoddard	137,577	Apr. 8, 1873	279	85-86	3	391
Buggy shifting-top	R. C. Diehl	140,351	July 1, 1873	16	5	4	9
Building-block	F. W. Colby	143,809	Oct. 21, 1873	400	133	4	431
Building-block	G. De Witt and J. Fairman	140,122	June 24, 1873	645	203	3	692
Building-block	S. T. Fowler	139,462	June 3, 1873	17	5	3	610
Building-block	T. Hyatt	142,475	Sept. 2, 1873	137	45	4	253
Building-block	R. M. Seldis	144,149	Oct. 28, 1873	706	235	4	466
Building-block, Fire-proof	W. T. Van Zandt and L. A. Tartere	136,684	Mar. 11, 1873	306	.....	3	279
Building-block Mold for forming	A. Derrom	139,050	May 20, 1873	527	166	3	564
Building-elevator	E. Keech	139,896	June 17, 1873	434	134	3	667
Building-elevator	L. S. Schuyler and S. I. Thursby	140,082	June 17, 1873	588	186	3	680
Building, Fire-proof	A. K. Holte	136,515	Mar. 4, 1873	145	47	3	257
Building, Fire-proof	G. H. Johnson	143,351	Sept. 30, 1873	907	308	4	364
Building, Fire-proof	J. E. Mulford	139,415	May 27, 1873	877	281	3	599
Building, Fire-proof	L. A. Tartere	143,196	Sept. 23, 1873	761	263	4	337
Building, Fire-proof	L. A. Tartere	143,197	Sept. 23, 1873	762	263	4	337
Building, Fire-proof	J. H. Walker	142,422	Sept. 2, 1873	87	29	4	249
Building material, Device for elevating	J. H. Coe	140,116	June 24, 1873	640	201	3	692
Building material, Machine for elevating	J. King	139,161	May 20, 1873	639	200	3	572
Building-ventilator	G. R. Barker	193,868	Oct. 21, 1873	449	149	4	435
Buildings, Compound for sanitary and decorative articles used in	J. Rust	143,096	Sept. 23, 1873	685	.....	4	330
Buildings, Construction of	W. Beschke	136,407	Mar. 4, 1873	47	17	3	249
Buildings, Construction of	H. H. Bryant	139,451	June 3, 1873	4	1	3	609
Buildings, Construction of	W. J. Morden	135,044	Jan. 21, 1873	515	166	3	76
Buildings, Construction of	J. Tall	138,710	May 6, 1873	215	68	3	515
Buildings, &c., Elevator for	G. Müller	144,350	Nov. 4, 1873	148	49	4	490
Buildings, Fire-extinguishing water-pipe attachment for	T. Miller	144,690	Nov. 18, 1873	452	153	4	538
Buildings, Flue for	E. T. Gould	141,219	July 29, 1873	825	270	4	111
Buildings, Ventilating	L. B. Valk	142,598	Sept. 9, 1873	254	83	4	274
Bullet	J. Rein and J. Stock	143,419	Oct. 7, 1873	22	9	4	382
Bullet-mold, revolving	J. Bradford	135,197	Jan. 28, 1873	659	212	3	101
Bullets, machine for patching	S. W. Wood	136,352	Feb. 25, 1873	886	285 } 286 }	3	234
Bundling kindling-wood, &c	H. A. House	138,026	Apr. 22, 1873	692	219	3	447
Bundling kindling-wood, &c., Machine for	H. A. House	138,027	Apr. 22, 1873	695	220	3	447
Bung	W. F. Class	136,415	Mar. 4, 1873	54	19	3	250
Bung	H. K. Hazlett	143,573	Oct. 14, 1873	165	55	4	402
Bung-bush	C. P. and L. W. Briggs	136,696	Mar. 11, 1873	314	104	3	279
Bung-bush inserter	L. Littlejohn	138,568	May 6, 1873	92	29	3	505
Bung-bush inserter	L. Littlejohn	145,807	Dec. 23, 1873	699	229	4	678
Bung-bushes, Tool for seating	L. Littlejohn	141,511	Aug. 5, 1873	90	28	4	142
Bung-bushings, Wrench for	G. W. Harris	143,757	Oct. 21, 1873	354	117	4	427
Bung for beer-barrels	E. Kraff	145,878	Dec. 23, 1873	762	249	4	683
Bung-hole, Tool for facing	T. T. Prosser and G. W. Gillett	135,843	Feb. 11, 1873	421	137	3	172
Bung, Machine for making	R. Boeklen	135,196	Jan. 28, 1873	657	212	3	101
Bung, Self-venting	C. F. Spencer	142,051	Aug. 19, 1873	595	196	4	200
Bungs for casks, &c., Making	R. Pentlarge	145,897	Dec. 23, 1873	779	255	4	684
Bureau and ironing-table combined	W. W. Adams	139,101	May 20, 1873	577	181	3	568
Bureau and wardrobe combined	H. H. Staugaard	145,312	Dec. 9, 1873	252	84	4	618
Bureau-drawers, Fastening for	A. J. Grant	141,001	July 22, 1873	610	205	4	86
Bureau, washstand, and wardrobe combined	T. W. Moore	137,380	Apr. 1, 1873	89	29	3	364
Burglar-alarm	F. W. Blakemore	145,836	Dec. 23, 1873	720	237	4	680
Burglar-alarm	H. L. Brown	145,332	Dec. 9, 1873	269	90	4	619
Burglar-alarm	H. L. Brower	136,210	Feb. 25, 1873	760	246	3	225
Burglar-alarm	J. F. Coppoch	137,532	Apr. 8, 1873	239	73	3	388
Burglar-alarm	E. M. Hendrickson	140,134	June 24, 1873	655	206	3	693

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Burglar-alarm	H. P. Hood	142,630	Sept. 9, 1873	279	91	4	276
Burglar-alarm	J. J. Kane	146,006	Dec. 30, 1873	896	290	4	704
Burglar-alarm	W. H. McPherson	137,016	Mar. 18, 1873	597	198	3	312
Burglar-alarm	M. R. Perkins	141,291	July 29, 1873	889	291	4	116
Burglar-alarm, Electrical	H. E. Walter	138,965	May 13, 1873	444	139	3	544
Burglar-alarm, Portable	J. Pennepacker	143,379	Sept. 30, 1873	932	316	4	366
Burglar-alarm, Portable	J. H. Thorp	139,440	May 27, 1873	897	289	3	601
Burial-case	J. B. Cox	143,438	Oct. 7, 1873	36	13	4	384
Burial-casket	H. Henika and M. F. Carder	139,465	June 3, 1873	19	6	3	610
Burial-casket	S. Stein	134,570	Jan. 7, 1873	64	20	3	12
Burial-casket handle	A. G. Chapman	137,289	Apr. 1, 1873	10	3	3	358
Burial-caskets, Composition for	A. N. Atwood	136,404	Mar. 4, 1873	45	.....	3	249
Burial-caskets, Composition for	W. H. Ross	141,238	July 29, 1873	843	.....	4	112
Burner Argand	C. E. Ball	140,108	June 24, 1873	634	199	3	691
Burner Argand gas	T. Clough	138,858	May 13, 1873	360	111	3	537
Burner for carbureters	I. W. Shaler	143,385	Sept. 30, 1873	936	317	4	367
Burner for heating, Gas	J. Van	142,360	Sept. 2, 1873	35	12	4	245
Burner, Gas	B. Andreae	139,352	May 27, 1873	813	260	3	594
Burner, Gas	J. W. Averill	141,415	Aug. 5, 1873	4	1	4	135
Burner, Gas	T. B. Fogarty	135,978	Feb. 18, 1873	544	180	3	196
Burner, Gas	T. B. Fogarty	135,979	Feb. 18, 1873	545	180	3	196
Burner, Gas	E. Foote	137,905	Apr. 15, 1873	574	180	3	428
Burner, Gas	G. W. Hatch	137,303	Apr. 1, 1873	21	7	3	359
Burner, Gas	J. and T. D. Richardson	140,164	June 24, 1873	680	214	3	695
Burner, Gas	J. Rigby	139,919	June 17, 1873	452	141	3	668
Burner, Gas	D. E. Ryan	139,481	June 3, 1873	34	11	3	611
Burner, Gas	I. W. Shaler	137,964	Apr. 15, 1873	622	196	3	432
Burner, Gas	I. Simmons	139,828	June 10, 1873	363	112	3	654
Burner, globe, and holder for gas	G. M. Ramsay	140,075	June 17, 1873	583	185	3	679
Burner, Lamp	L. J. Atwood	138,601	May 6, 1873	116	38	3	507
Burner, Lamp	B. F. Chappell	136,586	Mar. 11, 1873	226	76	3	272
Burner, Lamp	J. H. Doolittle	140,687	July 8, 1873	307	104	4	45
Burner, Lamp	T. W. Gardner	134,657	Jan. 7, 1873	148	47	3	18
Burner, Lamp	R. S. Merrill	145,438	Dec. 9, 1873	356	119	4	626
Burner, Lamp	W. N. Weeden	136,113	Feb. 18, 1873	664	217	3	205
Burner, Lamp	M. J. Wellman	134,718	Jan. 7, 1873	203	66	3	23
Burner, Lamp	J. N. Wyatt	137,276	Mar. 25, 1873	840	276	3	342
Burner, Oxyhydrocarbon-gas	J. D. Averell	143,555	Oct. 14, 1873	151	51	4	401
Burner, Revolving attachment for gas	J. O. Belknap	137,406	Apr. 1, 1873	112	37	3	366
Burner, Smoke and steam	J. W. Kingman and A. Eurgens	141,277	July 29, 1873	878	288	4	115
Burner, Tar and petroleum	J. Burns	140,465	July 1, 1873	103	35	4	17
Burner, Tar or petroleum	J. Law	135,649	Feb. 11, 1873	249	79	3	159
Burner, Vapor	J. Benson and A. H. Watkins	136,021	Feb. 18, 1873	584	192	3	199
Burner, Vapor	J. Benson and A. H. Watkins	136,022	Feb. 18, 1873	585	192	3	199
Burner, Vapor	M. F. Gale	140,029	June 17, 1873	539	171	3	676
Burner, Vapor	M. F. Gale	140,030	June 17, 1873	540	171	3	676
Burner, Vapor	J. C. Love	143,915	Oct. 2, 1873	486	164	4	438
Burner, Vapor	F. G. Palmer	138,923	May 13, 1873	411	129	3	541
Burner, Vapor	T. Simmons	141,823	Aug. 12, 1873	377	123	4	173
Burning liquid fuel and generating steam, Apparatus for	W. T. Scheide	140,220	June 24, 1873	726	229	3	699
Bushing, Anti-frictional	F. S. Burr	137,415	Apr. 1, 1873	120	40	3	367
Bustle	M. K. Bortree	136,127	Feb. 25, 1873	692	224	3	219
Bustle	M. Boupert	142,764	Sept. 16, 1873	404	136	4	297
Bustle	J. H. Hall	135,801	Feb. 11, 1873	384	124	3	169
Bustle	T. S. Sperry	135,379	Jan. 28, 1873	827	267	3	114
Bustle	T. Stockman	135,858	Feb. 11, 1873	433	141	3	173
Bustle	A. W. Thomas	140,966	July 15, 1873	565	189	4	73
Butcher's knife, saw, and spring-scales, combined	J. Baggs	138,362	Apr. 29, 1873	1,017	320	3	481
Butter-bucket	J. F. Dumont	136,713	Mar. 11, 1873	328	108	3	281
Butter-coloring compound	G. Bogart, W. H. Cramer, and W. L. Lewis	142,891	Sept. 16, 1873	505	.....	4	305
Butter cutter and lifter, Gaged	T. E. Colbrunn	142,207	Aug. 26, 1873	743	244	4	222
Butter-knife rest	B. D. Reed	135,156	Jan. 21, 1873	604	196	3	84
Butter package	J. Andrews	137,752	Apr. 15, 1873	441	137	3	417
Butter-paddle	D. L. Grover	138,800	May 13, 1873	307	95	3	533
Butter-print press	L. Coates and J. T. Criswell	142,838	Sept. 16, 1873	464	157	4	302
Butter-printing machine	D. E. Dutrow	135,323	Jan. 28, 1873	775	251	3	110
Butter-printing machine	A. F. Hines	140,704	July 8, 1873	323	109	4	46
Butter, Refining	G. W. Kirchhöffer	139,796	June 10, 1873	335	104	3	651
Butter-rolls, Forming and gaging	C. H. Fancher	137,064	Mar. 25, 1873	650	215	3	327
Butter-tub	A. J. Drake	142,843	Sept. 16, 1873	469	159	4	302
Butter-tub, &c., Hasp for	H. C. Carter	144,889	Nov. 25, 1873	630	214	4	563
Butter-worker	S. H. Bush	145,624	Dec. 16, 1873	531	174	4	652
Butter-worker	D. W. Dake	134,788	Jan. 14, 1873	275	90	3	42
Butter-worker	D. W. Dake	144,662	Nov. 18, 1873	429	145	4	536
Butter-worker	D. W. Dake	145,338	Dec. 9, 1873	274	92	4	620
Butter-worker	W. N. Golden	139,571	June 3, 1873	109	37	3	618
Butter-worker	J. McBride	138,723	June 10, 1873	267	84	3	646
Butter-worker	E. E. Scott	143,260	Sept. 30, 1873	824	283	4	358
Butter-worker	P. M. Stackhouse	140,739	July 8, 1873	352	118	4	48
Button	J. N. Allen	139,991	June 17, 1873	504	160	3	673
Button	M. P. Carpenter	137,824	Apr. 15, 1873	503	157	3	422
Button	J. Durand	142,686	Sept. 9, 1873	326	109	4	280
Button	A. E. Thurber	136,882	Mar. 18, 1873	480	159	3	302
Button	F. Washbourne	138,107	Apr. 22, 1873	766	243	3	453
Button and lacing-hook, Machine for setting	H. C. Bradford	135,763	Feb. 11, 1873	346	111	3	167
Button and stud attachment	H. Freeman	138,745	May 13, 1873	260	81	3	528
Button and stud, Shirt	J. T. Thornton	138,595	May 6, 1873	112	37	3	507
Button, Clasp	A. Flatley	136,648	Mar. 11, 1873	276	92	3	276
Button, Cuff	F. McCarthy	140,211	June 24, 1873	720	226	3	698
Button-fastening	A. Brookmann	138,608	May 6, 1873	121	40	3	508
Button-fastening	D. Cannata	140,008	June 17, 1873	519	165	3	674
Button-fastening	I. F. Eaton	143,892	Oct. 21, 1873	468	157	4	436

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Button-fastening	W. Holloway	140,627	July 8, 1873	259	88	4	41
Button-fastening	W. A. and F. V. Johnson and H. S. Worth.	143,512	Oct. 7, 1873	96	34	4	388
Button-fastening	M. Ormsbee	139,808	June 10, 1873	346	107	3	552
Button-fastening	C. H. Reid	142,043	Aug. 19, 1873	586	192	4	199
Button-fastening	N. B. Smith	136,556	Mar. 4, 1873	184	59	3	260
Button-fastening	E. J. F. Stolpe	138,708	May 6, 1873	214	67	3	515
Button-fastening	E. S. Wheeler	141,743	Aug. 12, 1873	302	99	4	168
Button, Garment	A. C. Wilhelm	135,739	Feb. 11, 1873	325	104	3	165
Button, Glass	A. M. Smith	135,375	Jan. 28, 1873	824	266	3	114
Button-holder	M. J. Cooper	145,556	Dec. 16, 1873	476	156	4	648
Button-hole cutter	A. Day	135,893	Feb. 18, 1873	479	154	3	191
Button-hole cutter	W. C. McGill	139,472	June 3, 1873	26	8	3	611
Button-hole cutter	C. F. Tebbets and G. Nutting ..	139,437	May 27, 1873	894	288	3	601
Button-hole cutter	C. Van Hoosen	139,983	June 17, 1873	499	158	3	672
Button-hole cutter and punch ..	A. L. Whitney	137,745	Apr. 8, 1873	429	132	3	403
Button-making machine	J. F. Bapterosses	141,749	Aug. 12, 1873	308	101	4	168
Button, Manufacture of	C. M. Platt	138,525	May 6, 1873	52	18	3	502
Button mold, Fancy	F. Maass	143,916	Oct. 21, 1873	487	164	4	438
Button-molds, Tool for making ..	J. S. Hawkins	143,073	Sept. 23, 1873	666	229	4	329
Button or stud, Collar	J. I. Waddell	137,807	Apr. 15, 1873	490	153	3	421
Button or stud, Shirt	T. J. Holmes	145,948	Dec. 30, 1873	847	275	4	700
Buttons, Means for fastening ..	I. F. Eaton	143,891	Oct. 21, 1873	467	157	4	436
C.							
Cabinet chair and secretary combined ..	C. S. Trevitt	137,738	Apr. 8, 1873	422	130	3	403
Cable stopper	J. M. Kilner	140,202	June 24, 1873	713	224	3	698
Cage, Wire	M. Grebner	139,784	June 10, 1873	325	101	3	651
Caisson	A. G. Wolfram	145,039	Nov. 25, 1873	757	256	4	574
Cake and bread, Box for preserving ..	A. R. Ledoux	135,433	Feb. 4, 1873	39	11	3	130
Cake-cutter	J. Webster	139,217	May 20, 1873	686	216	3	577
Cake-pan	J. B. Firth	140,619	July 8, 1873	254	86	4	40
Calculating machine	T. Esersky	144,523	Nov. 11, 1873	302	102	4	514
Calculating machine	G. B. Grant	138,245	Apr. 29, 1873	910	287	3	473
Calendar-catch	R. C. Ogden	140,300	June 24, 1873	793	252	3	705
Calendar-rolls, Feed-regulator for ..	M. Lawler	134,810	Jan. 14, 1873	295	95	3	44
Calendering-machine	D. Lechofield	142,872	Sept. 16, 1873	491	167	4	304
Calipers	W. H. Miner	143,584	Oct. 14, 1873	174	59	4	403
Caloric engine	N. A. Otto	145,123	Dec. 2, 1873	77	25	4	591
Camera :							
See Photographic camera.							
Stereoscopic camera.							
Camera-stand	N. S. Bowdish	141,256	July 29, 1873	860	281	4	114
Camera-stand	B. Holler	136,997	Mar. 18, 1873	579	193	3	310
Cam-grooves, Machine for dressing ..	G. M. Pratt and V. A. King ..	135,584	Feb. 4, 1873	181	56	3	141
Cam-movement	J. E. Goodwin	143,235	Sept. 30, 1873	801	276	4	356
Cam, Sectional adjustable slotted ..	F. D. Eldersfield	141,548	Aug. 5, 1873	121	38	4	145
Camphor, preparing	W. F. Simes	136,623	Mar. 11, 1873	257		3	275
Can :							
See Cotton or woolen can.							
Dinner-can.							
Fruit-can.							
Measuring-can.							
Metal can.							
Milk-can.							
Oil-can.							
Oil-dripping can.							
Oyster-can.							
Oyster-packing can.							
Paint-can.							
Preserving-can.							
Sealed can.							
Seamless can.							
Tin can.							
Can	C. A. Murdock	139,181	May 20, 1873	656	205	3	574
Can-filler	R. Newton	138,574	May 6, 1873	96	31	3	505
Can for transporting oil, &c	J. E. Pimley	146,020	Dec. 30, 1873	909	294	4	705
Cans, Machine for holding and soldering ..	J. Redheffer	136,265	Feb. 25, 1873	812	262	3	229
Cans, Machine for holding and soldering ..	W., J., jr., and T. G. Redheffer, and L. A. Smith.	137,027	Mar. 18, 1873	605	200	3	312
Can-opener	C. J. C. Petersen	140,072	June 17, 1873	580	184	3	679
Can-opener	J. J. Reed	137,149	Mar. 25, 1873	723	240	3	333
Can-opener	L. B. Smith	140,088	June 17, 1873	596	188	3	680
Can-opener	J. Wood	140,604	July 8, 1873	242	82	4	39
Can-opener and knife or fork combined ..	T. Kenderdine	142,109	Aug. 26, 1873	662	217	4	215
Can-opener and pipe-cutter	D. A. Barnes	144,051	Oct. 28, 1873	628	207	4	460
Can with tomatoes, Apparatus for filling ..	C. S. Bucklin	143,613	Oct. 14, 1873	199	67	4	405
Canal	H. Hill	138,156	Apr. 22, 1873	804	256	3	456
Canal-boat	W. A. Leggo	132,664	May 6, 1873	175	56	3	512
Canal-boats, Construction of	G. B. Martin	134,555	Jan. 7, 1873	49	15	3	11
Canal-boats, Means of snubbing	T. W. Edgar	136,982	Mar. 18, 1873	565	188	3	309
Canal-boats, Towing	I. P. Tice	136,343	Feb. 25, 1873	878	283	3	234
Canals, &c., Means of keeping open the navigation of ..	J. Mullaly	143,833	Oct. 21, 1873	420	140	4	433
Candle-guard	B. Morgan	141,066	July 22, 1873	666	224	4	91
Candle-mold tip	I. Cole	138,380	Apr. 29, 1873	1,032	325	3	483
Candles, Drip-cup for	D. M. Ayer	140,755	July 15, 1873	371	127	4	58
Candlestick	C. H. Doughty	136,233	Feb. 25, 1873	770	249	3	225
Candlestick	S. D. Hill	142,162	Aug. 26, 1873	705	233	4	219
Candlestick	W. H. H. Hinds	145,502	Dec. 16, 1873	420	138	4	643
Candlestick	Z. I. Pratt	136,864	Mar. 18, 1873	465	154	3	301
Candlestick	A. E. Rogers	137,029	Mar. 18, 1873	608	201	3	312
Candlestick for ships, Swinging	J. J. Walton and E. A. Barrett ..	136,290	Feb. 25, 1873	832	269	3	230
Candy-cutter	J. W. Kaskel	146,076	Dec. 30, 1873	955	308	4	709
Candy-cutter	F. Quinn	143,590	Oct. 14, 1873	178	60	4	403

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Candy-jar lid	W. C. King	138,503	May 6, 1873	29	10	3	500
Candyng machine	F. W. C. Spiess	135,672	Feb. 11, 1873	270	85	3	161
Cane	F. Eckstein	146,054	Dec. 30, 1873	938	302	4	708
Cane	M. Osborn	139,020	May 20, 1873	504	159	3	562
Cane-crusher, Hydraulic	C. H. Dickinson	137,349	Apr. 1, 1873	67	21	3	362
Cane-juice, Apparatus for treating	G. C. Taylor	140,443	July 1, 1873	83	29	4	15
Cane-juice-extracting apparatus	D. Moffat	143,089	Sept. 23, 1873	678	233	4	330
Cane-juice with sulphur-fume, Apparatus for treating	W. G. Billin	141,914	Aug. 19, 1873	472	155	4	190
Cane-juice with sulphurous-acid gas, Apparatus for treating	J. Dymond	134,655	Jan. 7, 1873	146	47	3	18
Cane-seats for chairs, Needle for weaving	D. C. Mosher	142,808	Sept. 16, 1873	440	148	4	300
Cane-stripper	R. C. James	141,057	July 22, 1873	655	221	4	90
Cane, Walking	C. K. Pevey	143,248	Sept. 30, 1873	814	279	4	357
Canopied chair	T. Elkinton	144,521	Nov. 11, 1873	300	101	4	514
Canteen	R. Kelly	135,432	Feb. 4, 1873	38	11	3	130
Canteen, Hospital	H. Beck	136,808	Mar. 18, 1873	423	140	3	298
Cant-hook	E. Mansfield	142,032	Aug. 19, 1873	573	189	4	199
Cant-hook	R. Whittier	141,906	Aug. 19, 1873	467	152	4	190
Canvas and cordage, Solution for preserving	C. Nelson	134,559	Jan. 7, 1873	55	.....	3	11
Canvas-stretcher	H. W. Holly	142,232	Aug. 26, 1873	765	251	4	224
Canvas stretching and protecting frame	A. Dickerman	141,547	Aug. 5, 1873	120	37	4	145
Canvas to form tarpaulins, Coating	C. Cobb	141,764	Aug. 12, 1873	323	.....	4	169
Cap	M. N. Myers	138,681	May 6, 1873	190	61	3	513
Cap	B. Scharl	137,032	Mar. 18, 1873	610	202	3	313
Cap setting and extracting device	E. S. Holmes	139,674	June 10, 1873	215	70	3	642
Capped-nail	C. Walsh	143,393	Sept. 30, 1873	943	319	4	367
Capsules, Machine for making plaited	J. J. Baranowski	137,403	Apr. 1, 1873	109	35, 36	3	366
Car and window washer	P. S. Devlan	136,310	Feb. 25, 1873	846	273	3	231
Car-axle	B. Ahrens and D. Gerhard	142,757	Sept. 16, 1873	400	135	4	296
Car-axle	G. W. Miltimore	144,347	Nov. 4, 1873	145	48	4	490
Car-axle	T. R. Timby	136,791	Mar. 11, 1873	394	130	3	286
Car-axle, Lubricating	J. R. Morris	134,696	Jan. 7, 1873	187	60	3	21
Car-axle, Railway	R. N. Allen	139,226	May 27, 1873	707	223	3	586
Car-axle, Railway	T. C. Theaker	137,977	Apr. 15, 1873	632	199	3	433
Car-axles with axle-boxes, Device for connecting	L. Pritchard	140,303	June 24, 1873	796	253	3	705
Car-basket, Railway	J. F. Hudson	140,504	July 1, 1873	138	47	4	19
Car-body and truck, Connecting and disconnecting	C. D. Tisdale	139,835	June 10, 1873	369	114	3	654
Car-brake	W. H. Browne and W. M. Pegram	136,581	Mar. 11, 1873	222	74	3	272
Car-brake	J. N. Brush	138,126	Apr. 22, 1873	779	249	3	454
Car-brake	W. Ebbitt	140,260	June 24, 1873	759	240	3	702
Car-brake	E. Farnsworth	138,141	Apr. 22, 1873	791	252	3	455
Car-brake	E. P. Harrington	144,537	Nov. 11, 1873	316	107	4	515
Car-brake	M. Karg	144,681	Nov. 18, 1873	445	150	4	537
Car-brake	J. L. Knowlton	137,079	Mar. 25, 1873	666	221	3	328
Car-brake	A. Langellier	143,083	Sept. 23, 1873	674	232	4	329
Car-brake	W. Naylor	144,351	Nov. 4, 1873	148	50	4	490
Car-brake	J. B. Pelton	144,787	Nov. 18, 1873	532	181	4	545
Car-brake	E. O. Richard	143,187	Sept. 23, 1873	751	260	4	336
Car-brake	A. M. Rouse	134,934	Jan. 14, 1873	402	128	3	52
Car-brake	W. H. M. Sanger	135,161	Jan. 21, 1873	607	197	3	84
Car-brake	J. Shannon	138,535	May 6, 1873	60	20	3	502
Car-brake	J. Temple	141,608	Aug. 5, 1873	173	55	4	149
Car-brake	I. H. Voorhies	137,264	Mar. 25, 1873	832	273	3	341
Car-brake	W. Warinner	142,658	Sept. 9, 1873	304	100	4	278
Car-brake	W. Warwick and H. C. Duggan	144,240	Nov. 4, 1873	63	19	4	483
Car-brake	J. G. Wiggan	145,470	Dec. 9, 1873	383	127	4	628
Car-brake and propelling mechanism, Combined	J. W. Hill	141,272	July 29, 1873	876	287	4	115
Car-brake, Automatic-railway	G. E. Earl	139,557	June 3, 1873	97	33	3	617
Car-brake, Coal	D. Wetsel	139,097	May 20, 1873	574	180	3	567
Car-brake, Hydraulic	J. F. Taylor	144,578	Nov. 11, 1873	351	{ 118 119 }	4	518
Car-brake, Hydraulic or air	W. M. Henderson	143,980	Oct. 28, 1873	565	187	4	454
Car-brake, Hydraulic-railway	W. M. Henderson	141,790	Aug. 12, 1873	351	115	4	171
Car-brake, Railway	L. Adams	144,013	Oct. 28, 1873	598	198	4	457
Car-brake, Railway	J. S. Anderson	139,527	June 3, 1873	71	24	3	614
Car-brake, Railway	F. G. Bates	136,019	Feb. 18, 1873	582	192	3	199
Car-brake, Railway	G. W. Crowe	140,349	July 1, 1873	15	4	4	9
Car-brake, Railway	J. F. Elder	135,212	Jan. 28, 1873	675	218	3	102
Car-brake, Railway	G. W. Morris	138,678	May 6, 1873	188	60	3	513
Car-brake, Railway	W. D. Pope	142,649	Sept. 9, 1873	294	96	4	277
Car-brake, Railway	L. Stebbins	135,017	Jan. 21, 1873	492	158	3	75
Car-brake, Railway	G. Westinghouse, jr.	142,600	Sept. 9, 1873	256	84	4	274
Car-brake, Self-acting coal	J. D. Leonard	142,572	Sept. 9, 1873	232	76	4	272
Car-brake wheel, Railway	C. A. Waterbury	138,968	May 13, 1873	446	140	3	544
Car, Buffer spring for railway	C. W. Saladee	135,369	Jan. 28, 1873	818	264	3	113
Car by compressed air, Apparatus for propelling street	W. H. H. Bowers	142,433	Sept. 2, 1873	96	32	4	250
Car-chock for railway-rails	W. O. Stephenson	136,625	Mar. 11, 1873	259	97	3	275
Car, Convertible freight	T. Fogg	138,142	Apr. 22, 1873	792	253	3	455
Car, Convertible freight	W. Worsley	137,871	Apr. 15, 1873	542	169	3	425
Car-coupler	W. D. Tisdale	136,627	Mar. 11, 1873	260	87	3	275
Car-coupling	O. Albrecht	139,850	June 17, 1873	388	121	3	663
Car-coupling	T. Andress	144,428	Nov. 11, 1873	227	76	4	508
Car-coupling	A. A. Atwater	144,494	Nov. 11, 1873	279	94	4	513
Car-coupling	B. Atkinson	140,667	July 8, 1873	290	98	4	43
Car-coupling	E. W. Barker	140,805	July 15, 1873	413	140	4	61
Car-coupling	W. B. Barnes	141,258	July 29, 1873	862	282	4	114
Car-coupling	J. W. Bates	134,629	Jan. 7, 1873	120	39	3	16
Car-coupling	T. Beddow and A. T. Jackson	141,103	July 22, 1873	701	235	4	94
Car-coupling	W. E. Beman	136,958	Mar. 18, 1873	544	180	3	307
Car-coupling	L. D. Bennett	142,142	Aug. 26, 1873	690	227	4	218
Car-coupling	E. Bickell	141,312	July 29, 1873	908	298	4	118
Car-coupling	C. S. Bigler	135,686	Feb. 11, 1873	285	89	3	162
Car-coupling	A. W. Bohaker	143,491	Oct. 7, 1873	79	27	4	387
Car-coupling	W. A. Boyden	143,055	Sept. 23, 1873	654	224	4	328
Car-coupling	D. Bradford	135,316	Jan. 28, 1873	766	247	3	109

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Car-coupling.....	W. C. Brooks.....	144, 015	Oct. 28, 1873	599	198	4	457
Car-coupling.....	R. B. Buckner.....	141, 756	Aug. 12, 1873	315	103	4	169
Car-coupling.....	R. Butt.....	144, 439	Nov. 11, 1873	234	79	4	509
Car-coupling.....	D. C. Camerer.....	141, 991	Aug. 19, 1873	532	176	4	195
Car-coupling.....	A. F. Chandler.....	144, 954	Nov. 25, 1873	681	231	4	568
Car-coupling.....	W. J. Chaplin.....	135, 775	Feb. 11, 1873	356	114 115	3	167
Car-coupling.....	J. T. L. Cochran.....	144, 956	Nov. 25, 1873	683	231	4	568
Car-coupling.....	W. A. Cochran.....	144, 658	Nov. 18, 1873	427	144	4	536
Car-coupling.....	G. W. Coffin.....	136, 033	Feb. 18, 1873	593	195	3	200
Car-coupling.....	W. T. Collins.....	135, 890	Feb. 18, 1873	477	153	3	191
Car-coupling.....	C. C. Converse.....	144, 386	Nov. 11, 1873	190	65	4	505
Car-coupling.....	W. R. Coovert.....	144, 257	Nov. 4, 1873	75	24	4	484
Car-coupling.....	J. Crist.....	142, 209	Aug. 26, 1873	744	245	4	222
Car-coupling.....	T. H. Cross.....	142, 993	Sept. 23, 1873	600	204	4	323
Car-coupling.....	G. D. Crosthwait.....	136, 039	Feb. 18, 1873	598	196	3	200
Car-coupling.....	P. H. Decker and N. Lee.....	141, 635	Aug. 12, 1873	214	67	4	160
Car-coupling.....	J. L. De Good.....	134, 648	Jan. 7, 1873	140	45	3	18
Car-coupling.....	M. Disney.....	140, 124	June 24, 1873	646	203	3	692
Car-coupling.....	M. C. Doubleday.....	136, 222	Feb. 25, 1873	769	249	3	225
Car-coupling.....	R. H. Dowling.....	142, 682	Sept. 9, 1873	323	107	4	280
Car-coupling.....	J. L. Duncan.....	142, 998	Sept. 23, 1873	604	205	4	324
Car-coupling.....	G. Edmonds.....	143, 680	Oct. 14, 1873	261	86	4	410
Car-coupling.....	J. M. Enos.....	142, 219	Aug. 26, 1873	751	248	4	223
Car-coupling.....	J. Enos.....	143, 894	Oct. 21, 1873	470	158	4	436
Car-coupling.....	M. Ferren.....	143, 231	Sept. 30, 1873	798	275	4	355
Car-coupling.....	F. A. Fleming.....	143, 752	Oct. 21, 1873	349	116	4	427
Car-coupling.....	F. Fox and F. A. Howarth.....	135, 537	Feb. 4, 1873	133	42	3	138
Car-coupling.....	J. J. Fraikin.....	141, 432	Aug. 5, 1873	19	5	4	136
Car-coupling.....	J. A. Gale.....	140, 131	June 24, 1873	653	205	3	693
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Car-coupling.....	J. W. and J. W. Gillam, jr.....	135, 984	Feb. 18, 1873	550	182	3	197
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Car-coupling.....	J. Griffith and W. F. Miller.....	143, 281	Sept. 30, 1873	841	289	4	359
Car-coupling.....	J. Growdon.....	136, 237	Feb. 25, 1873	782	252	3	226
Car-coupling.....	J. Gum.....	143, 756	Oct. 21, 1873	353	117	4	427
Car-coupling.....	W. W. Haver.....	142, 849	Sept. 16, 1873	473	161	4	303
Car-coupling.....	J. W. Hess.....	145, 652	Dec. 16, 1873	554	182	4	654
Car-coupling.....	J. Hiers.....	142, 230	Aug. 26, 1873	762	251	4	224
Car-coupling.....	J. E. Hitt.....	135, 552	Feb. 4, 1873	147	47	3	139
Car-coupling.....	J. F. L. Holman.....	143, 011	Sept. 23, 1873	614	209	4	325
Car-coupling.....	F. E. Howard.....	142, 395	Sept. 2, 1873	67	22	4	247
Car-coupling.....	E. H. Janney.....	138, 405	Apr. 29, 1873	1, 052	331	3	484
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Car-coupling.....	J. Keck.....	145, 428	Dec. 9, 1873	350	117	4	625
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Car-coupling.....	L. B. Lewis.....	141, 445	Aug. 5, 1873	32	10	4	137
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Car-coupling.....	J. C. Maloy.....	145, 067	Dec. 2, 1873	25	8	4	587
Car-coupling.....	H. E. Marchand.....	137, 225	Mar. 25, 1873	796	263	3	338
Car-coupling.....	F. W. Marston and O. Jones.....	137, 014	Mar. 18, 1873	595	197	3	311
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Car-coupling.....	A. Middleton, jr.....	142, 492	Sept. 2, 1873	156	51	4	254
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Car-coupling.....	C. L. Miller.....	142, 715	Sept. 9, 1873	348	118	4	282
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Car-coupling.....	W. B. Mitchell.....	145, 584	Dec. 16, 1873	498	163	4	650
Car-coupling.....	B. D. Moody.....	139, 016	May 20, 1873	501	158	3	562
Car-coupling.....	B. Moore.....	134, 695	Jan. 7, 1873	185	60	3	21
Car-coupling.....	G. R. Moore.....	145, 746	Dec. 23, 1873	648	213	4	674
Car-coupling.....	D. C. Morris.....	137, 617	Apr. 8, 1873	309	96	3	394
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Car-coupling.....	T. N. Pengelly.....	136, 176	Feb. 25, 1873	736	237	3	223
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Car-coupling.....	E. F. Plant.....	136, 759	Mar. 11, 1873	367	122	3	284
Car-coupling.....	W. D. Pope.....	143, 638	Oct. 14, 1873	221	74	4	407
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Car-coupling.....	G. W. Putnam.....	143, 716	Oct. 14, 1873	298	97	4	412
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Car-coupling.....	S. B. Replogle.....	136, 547	Mar. 4, 1873	178	57	3	259
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Car-coupling.....	H. G. Russell.....	144, 479	Nov. 11, 1873	267	90	4	511
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Car-coupling.....	A. Schorg and B. Van Valkenburgh	143, 099	Sept. 23, 1873	686	236	4	330
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Car-coupling.....	J. Seislove.....	143, 593	Oct. 14, 1873	180	61	4	404
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Car-coupling.....	J. E. Smith.....	142, 818	Sept. 16, 1873	447	151	4	300
Car-coupling.....	T. Smith.....	141, 177	July 22, 1873	775	253	4	99
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Car, Hand.....	J. D. Hinckley.....	140, 039	June 17, 1873	551	174	3	677
Car, Hand.....	D. M. Hunt.....	136, 652	Mar. 11, 1873	279	93	3	277
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Car-mat.....	J. O'Neill.....	145, 588	Dec. 16, 1873	501	165	4	650
Car-mover.....	R. A. Cowell.....	141, 327	July 29, 1873	923	302	4	119
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Car-propeller.....	R. Steel and S. Austin.....	144, 235	Nov. 4, 1873	59	18	4	483
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Car, Railway.....	C. W. Saladee.....	145, 366	Dec. 9, 1873	294	99	4	621
Car, Railway.....	K. Thompson and S. D. Beer-brower.	145, 255	Dec. 2, 1873	194	67	4	600
Car, Railway.....	J. C. Wands.....	142, 062	Aug. 19, 1873	603	199	4	201
Car, Railway freight.....	R. H. Gordon, sr.....	139, 243	May 27, 1873	725	222 229	3	587
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Car-roof.....	J. C. Wands.....	136, 569	Mar. 4, 1873	195	64, 65	3	261
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Car-spring.....	E. T. Bussell.....	144, 600	Nov. 18, 1873	376	127	4	532
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Car-spring.....	D. G. Daniels.....	137, 295	Apr. 1, 1873	14	5	3	358
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Car-spring.....	G. F. Godley.....	137, 300	Apr. 1, 1873	19	6	3	358
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Car-spring.....	J. B. Quirk.....	138, 433	Apr. 29, 1873	1, 081	341	3	486
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Car spring, Railway.....	G. F. Godley.....	140, 192	June 24, 1873	705	222	3	697
Car spring, Railway.....	W. Slicer.....	140, 084	June 17, 1873	592	187	3	680
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Car-starter.....	L. D. Benner.....	134, 840	Jan. 14, 1873	321	103	3	46
Car-starter.....	S. R. and A. C. Bradley.....	138, 848	May 13, 1873	351	109	3	536
Car-starter.....	T. Cooper.....	138, 233	Apr. 29, 1873	899	284	3	472
Car-starter.....	J. Corbeil.....	141, 326	July 29, 1873	923	301	4	119
Car-starter.....	A. H. Crozier.....	144, 260	Nov. 4, 1873	78	25	4	484
Car-starter.....	G. Fetter.....	139, 134	May 20, 1873	611	191	3	570
Car-starter.....	G. W. Field and J. Steger.....	139, 563	June 3, 1873	103	35	3	617
Car-starter.....	T. W. Johnson.....	140, 781	July 15, 1873	391	134	4	59
Car-starter.....	J. B. Jones.....	135, 920	Feb. 18, 1873	499	162	3	192
Car-starter.....	W. A. Jordan.....	144, 546	Nov. 11, 1873	325	109	4	516
Car-starter.....	W. W. Lamberton and D. R. Lemman.	135, 564	Feb. 4, 1873	156	50, 51	3	140
Car-starter.....	G. Lowden.....	139, 721	June 10, 1873	265	83	3	646
Car-starter.....	C. J. Moore.....	141, 159	July 22, 1873	753	248	4	98
Car-starter.....	B. F. Oakes.....	143, 837	Oct. 21, 1873	423	141	4	433
Car-starter.....	L. C. Rodier and F. G. Bates.....	138, 440	Apr. 29, 1873	1, 088	344	3	487
Car-starter.....	J. G. Thompson.....	145, 600	Dec. 16, 1873	510	168	4	651
Car-starter.....	I. C. Wallace and J. W. Andrews.	146, 112	Dec. 30, 1873	990	320	4	712
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Car-starter.....	V. Wirick.....	145, 076	Dec. 2, 1873	34	11	4	588
Car-starter.....	J. J. Wheeler.....	135, 187	Jan. 21, 1873	628	205	3	86
Car-starter.....	A. Whittemore.....	140, 229	June 24, 1873	732	231	3	699
Car-starter.....	A. Whittemore.....	143, 948	Oct. 21, 1873	513	173	4	440
Car-starter.....	A. Whittemore.....	145, 468	Dec. 9, 1873	481	126	4	628
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Car, Street.....	W. T. Jenks.....	135, 277	Jan. 28, 1873	736	237	3	107
Car, Street railway.....	S. H. Little.....	140, 052	June 17, 1873	563	177	3	678
Car, Trussed-spring bolster for railway.....	J. Anderson.....	141, 618	Aug. 12, 1873	200	63	4	159
Car unloader, Grain.....	M. W. Bosworth.....	145, 780	Dec. 23, 1873	678	222	4	676
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Car-ventilator.....	J. J. Crowley.....	135, 971	Feb. 18, 1873	539	178	3	196
Car-ventilator.....	C. C. Gerhardt.....	136, 502	Mar. 4, 1873	130	42	3	256
Car-ventilator.....	M. T. Hitchcock.....	145, 871	Dec. 23, 1873	754	246	4	682
Car-ventilator.....	S. C. Maine.....	142, 799	Sept. 16, 1873	432	146	4	299
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Car ventilator, Railway.....	D. W. Noyes.....	136, 756	Mar. 11, 1873	365	121	3	284
Car ventilator, Railway.....	J. D. Simmons.....	145, 760	Dec. 23, 1873	663	216	4	675
Car-wheel.....	A. Atwood.....	140, 339	July 1, 1873	3	1	4	8
Car-wheel.....	J. E. Atwood.....	144, 495	Nov. 11, 1873	280	94	4	513
Car-wheel.....	A. F. Cooper.....	143, 560	Oct. 14, 1873	154	52	4	401
Car-wheel.....	G. Elmslie.....	144, 195	Nov. 4, 1873	22	6	4	480
Car-wheel.....	A. C. Fletcher.....	145, 856	Dec. 23, 1873	740	242	4	681
Car-wheel.....	F. A. Fouts.....	138, 798	May 13, 1873	306	94	3	533
Car-wheel.....	J. W. Kern.....	136, 068	Feb. 18, 1873	625	205	3	202
Car-wheel.....	H. Merrill.....	138, 036	Apr. 22, 1873	706	223	3	448

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Car-wheel.....	R. Ramsey.....	134,929	Jan. 14, 1873	398	127	3	52
Car-wheel.....	J. K. Sax and G. W. Kear.....	142,587	Sept. 9, 1873	245	80	4	273
Car-wheel.....	G. W. and L. W. Snyder.....	136,392	Mar. 4, 1873	35	13	3	248
Car-wheel.....	J. and N. Tiranoff and A. Kon-sakoff.....	142,968	Sept. 16, 1873	574	194	4	311
Car-wheel.....	A. B. Wakefield and B. A. Berryman.....	137,266	Mar. 25, 1873	833	274	3	341
Car-wheel.....	W. Wilmington.....	135,870	Feb. 11, 1873	441	144	3	173
Car-wheel, Lubricating.....	J. H. Murray.....	143,370	Sept. 30, 1873	925	313	4	366
Car-wheel lubricator.....	W. A. Bullard.....	145,395	Dec. 9, 1873	319	108	4	623
Car-wheel, Railway.....	W. H. Paige.....	141,011	July 22, 1873	619	209	4	87
Car-wheels, &c., Manufacture of cast-iron for.....	C. Burgess.....	143,874	Oct. 21, 1873	454	.....	4	435
Car-wheels, Mold for casting.....	J. B. Tarr.....	142,821	Sept. 16, 1873	449	152	4	301
Car, Wheelbarrow dumping.....	H. J. Peters.....	137,862	Apr. 15, 1873	536	167	3	425
Car window-screen, Railway.....	J. E. Earle.....	146,053	Dec. 30, 1873	938	302	4	708
Car-window shield.....	H. S. Hale.....	146,066	Dec. 30, 1873	948	306	4	709
Car-window spring-attachment.....	G. Cornwall.....	135,086	Jan. 21, 1873	545	177	3	79
Car-window stop, Adjustable.....	C. Page.....	141,165	July 22, 1873	759	250	4	98
Car-window, Ventilating.....	C. B. Knevals.....	145,805	Dec. 23, 1873	697	229	4	678
Car-windows, Dust guard for.....	O. C. Rife.....	135,365	Jan. 28, 1873	816	263	3	113
Car-windows, Ventilator and cinder and dust-guard for.....	O. C. Rife.....	140,531	July 1, 1873	169	57	4	22
Cars, Apparatus for loading and unloading baggage and freight from.....	O. C. Brown.....	138,557	May 6, 1873	81	26	3	504
Cars, Brake-beam for.....	D. Wellington.....	145,605	Dec. 16, 1873	514	169	4	651
Cars, Combined brake and starter for street.....	C. L. Irving.....	143,909	Oct. 21, 1873	481	162	4	437
Cars, Draw-head for railway.....	H. C. Lowrie.....	145,881	Dec. 23, 1873	765	250	4	683
Cars, Dumping-platform for railway.....	J. W. Harrison.....	143,758	Oct. 21, 1873	354	118	4	427
Cars, Elevating and transferring apparatus of railway.....	W. T. Beekman.....	145,611	Dec. 16, 1873	520	{ 170 } 171	4	652
Cars, Folding-seat for street-railway.....	K. Egan.....	138,321	Apr. 29, 1873	987	310	3	479
Cars, Hanging signal-cord of railway.....	J. F. Rice.....	139,262	May 27, 1873	740	235	3	588
Cars, Loading railway flat.....	G. W. Penniston.....	138,577	May 6, 1873	98	31	3	506
Cars, Machine for bending truck-side for railway.....	J. H. Helm.....	143,010	Sept. 23, 1873	613	{ 208 } 209	4	324
Cars, Machine for unloading flat.....	G. S. Caldwell.....	138,476	May 6, 1873	10	3	3	498
Cars, Mechanism for stopping and starting street.....	J. M. Starr.....	144,484	Nov. 11, 1873	271	92	4	512
Cars, Plow for unloading.....	J. McMullin.....	135,351	Jan. 28, 1873	801	259	3	112
Cars, Propulsion of.....	R. De Leidi.....	135,972	Feb. 18, 1873	539	179	3	196
Cars, Running-gear for railway.....	J. S. Lester.....	143,516	Oct. 7, 1873	98	35	4	388
Cars, Safety-hatch for railway.....	R. Liston.....	135,923	Feb. 18, 1873	501	163	3	193
Cars, Safety-platform for.....	H. E. Marchand.....	138,669	May 6, 1873	179	57	3	512
Cars, Safety-platform for railway.....	R. Strode.....	144,804	Nov. 18, 1873	549	186	4	546
Carboys, Tilting-stand for.....	A. W. Caverly.....	144,442	Nov. 11, 1873	237	79	4	509
Carbureter.....	W. H. Elston.....	136,228	Feb. 25, 1873	774	250	3	226
Carbureter.....	F. A. Fisher.....	140,998	July 22, 1873	607	205	4	86
Carbureter.....	T. B. Fogarty.....	135,981	Feb. 18, 1873	547	181	3	196
Carbureter.....	T. B. Fogarty.....	135,982	Feb. 18, 1873	548	181	3	196
Carbureter.....	T. Judd and C. H. Pierson.....	140,711	July 8, 1873	328	111	4	46
Carbureter.....	J. F. G. Kromschroeder.....	137,307	Apr. 1, 1873	24	8	3	359
Carbureter.....	J. F. and G. E. Lockwood.....	142,545	Sept. 2, 1873	200	65	4	258
Carbureter.....	J. B. Lyman.....	146,082	Dec. 30, 1873	959	310	4	709
Carbureter.....	W. T. McMillen.....	143,523	Oct. 7, 1873	105	37	4	389
Carbureter.....	J. Masgrave.....	144,858	Nov. 25, 1873	609	207	4	561
Carbureter.....	I. W. Shaler.....	143,534	Oct. 7, 1873	118	40	4	390
Carbureter.....	I. Simmons.....	145,248	Dec. 2, 1873	187	64, 65	4	600
Carbureter.....	A. S. Wilkinson.....	140,105	June 17, 1873	610	192	3	681
Carbureter, Air.....	T. Judd and E. Doty.....	138,409	Apr. 29, 1873	1,057	{ 332 } 333	3	484
Carbureter, Air.....	E. F. Van Houten.....	141,968	Aug. 19, 1873	512	169	4	194
Carbureter, Gas.....	A. W. Porter.....	144,863	Nov. 25, 1873	613	208	4	561
Carbureting air, Machine for.....	J. H. Van Houten.....	135,020	Jan. 21, 1873	494	158	3	75
Carbureting-apparatus.....	T. Holmes.....	135,806	Feb. 11, 1873	393	126	3	170
Card and other cylinders, Device for traversing.....	F. Herboth.....	139,466	June 3, 1873	20	6	3	610
Card-back.....	H. R. Van Eps.....	138,454	Apr. 29, 1873	1,100	347	3	488
Card-case.....	H. H. Miller and T. Bennett.....	139,513	June 3, 1873	60	20	3	613
Card case, Postal.....	C. H. Townsend, T. E. Hughes, and A. A. Keith.....	144,423	Nov. 11, 1873	223	74	4	508
Card-grinding machine.....	T. C. Kirkham.....	140,376	July 1, 1873	34	11	4	11
Card-rack.....	D. A. Danforth and F. M. Winchester.....	139,298	May 27, 1873	774	245	3	591
Card-rack.....	J. J. Gray.....	135,272	Jan. 28, 1873	730	234	3	106
Card-mount.....	J. H. Caterson.....	143,878	Oct. 21, 1873	457	153	4	435
Card, Postal.....	H. M. Johnston.....	144,677	Nov. 18, 1873	440	.....	4	537
Card-stripping machine, Traversing-cam for.....	G. E. Taft.....	140,740	July 8, 1873	353	{ 118 } 119 120	4	48
Cards, Evener for wool.....	C. F. Morrison.....	144,348	Nov. 4, 1873	146	49	4	490
Cards for social games.....	P. West and G. S. Lee.....	142,423	Sept. 2, 1873	88	29	4	249
Cards, Playing.....	H. Billings.....	142,075	Aug. 26, 1873	631	207	4	213
Carding-machine, Condenser for.....	N. Lucas.....	143,020	Sept. 23, 1873	622	211	4	325
Carding-machines, &c., Condensing tube for.....	A. W. Skinner.....	135,015	Jan. 21, 1873	490	157	3	74
Carding machine, Delivering-apparatus for wool.....	J. and J. Dobson.....	144,840	Nov. 25, 1873	589	201	4	559
Carding-machine, Mechanism for operating the doffer-comb of.....	J. K. Proctor.....	140,304	June 24, 1873	796	253	3	705
Carding-machines, Waste-removing device for.....	G. W. Craner.....	140,814	July 15, 1873	424	144	4	62
Carpenters' bench.....	J. Jones.....	135,342	Jan. 28, 1873	793	256	3	111
Carpenters' gage.....	M. C. Robichau.....	141,014	July 22, 1873	623	210	4	87
Carpenters' gage.....	E. Sahn.....	144,359	Nov. 4, 1873	157	52	4	491
Carpenters' gage.....	J. A. Traut.....	141,475	Aug. 5, 1873	60	18	4	140
Carpet.....	J. Dornan.....	142,681	Sept. 9, 1873	322	107	4	280
Carpet.....	G. Iskiyan.....	145,803	Dec. 23, 1873	695	228	4	678
Carpet.....	R. Scott.....	142,947	Sept. 16, 1873	554	188	4	310
Carpet-beater.....	W. H. Hankinson.....	139,145	May 20, 1873	621	194	3	571
Carpet-beater.....	J. Hothersall.....	143,155	Sept. 23, 1873	727	250	4	334
Carpet-beater.....	W. G. Mowry and C. Pulis.....	140,525	July 1, 1873	158	54	4	21

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Carpet-cleaner.....	H. W. Bates.....	140,990	July 22, 1873	600	203	4	85
Carpet-cleaner.....	J. Spaulding.....	141,243	July 29, 1873	848	277	4	113
Carpet-fastener.....	C. B. Broune.....	135,884	Feb. 18, 1873	471	152	3	190
Carpet-fastener.....	C. Harting.....	143,238	Sept. 30, 1873	806	277	4	356
Carpet-fastener.....	B. D. Kested.....	143,784	Oct. 21, 1873	377	125	4	429
Carpet-fastener.....	A. J. Williams.....	137,118	Mar. 25, 1873	700	232	3	331
Carpet-lining machine.....	J. R. Harrington.....	141,270	July 29, 1873	874	286	4	115
Carpet-lining, Machine for manufacturing.....	E. H. Bailey.....	143,053	Sept. 23, 1873	653	223	4	327
Carpet, Manufacture of.....	H. A. Clarke.....	142,439	Sept. 2, 1873	102	34	4	251
Carpet, Printed piled.....	T. Crossley.....	139,706	June 10, 1873	252	.....	3	645
Carpet-rag looper.....	W. Clayton, jr.....	140,889	July 15, 1873	484	164	4	67
Carpet-rag looper.....	J. F. Cooper.....	145,094	Dec. 2, 1873	51	16	4	589
Carpet-rag looper.....	F. J. Egger.....	142,778	Sept. 16, 1873	418	141	4	298
Carpet-rag looper and button-hole cutter, Combined.....	G. W. Morris and W. Lenhart.....	144,472	Nov. 11, 1873	260	87	4	511
Carpet-rag looper, button-hole cutter, and press-board, Combined.....	S. M. Whitten.....	136,633	Mar. 11, 1873	265	89	3	276
Carpet-stretcher.....	W. A. Boles.....	141,418	Aug. 5, 1873	7	2	4	135
Carpet-stretcher.....	L. Faulkhauser.....	134,873	Jan. 14, 1873	350	111	3	48
Carpet-stretcher.....	J. S. Greene and T. D. Bradt.....	138,560	May 6, 1873	84	27	3	504
Carpet-stretcher.....	P. Kelly.....	138,333	Apr. 29, 1873	995	313	3	479
Carpet-stretcher.....	J. Lindsay.....	141,446	Aug. 5, 1873	32	10	4	137
Carpet-stretcher.....	J. Luther.....	144,464	Nov. 11, 1873	253	85	4	510
Carpet-stretcher.....	A. F. Michael and H. N. Duncan.....	140,522	July 1, 1873	154	52	4	21
Carpet-stretcher.....	H. Powelson.....	143,032	Sept. 23, 1873	633	216	4	326
Carpet-stretcher.....	N. K. Shelton.....	136,339	Feb. 25, 1873	874	282	3	233
Carpet-stretcher.....	C. Terry.....	138,450	Apr. 29, 1873	1,098	346	3	488
Carpet-stretcher.....	O. Vanorman.....	137,739	Apr. 8, 1873	424	130	3	403
Carpet-stretcher.....	D. White.....	137,522	Apr. 1, 1873	224	69	3	375
Carpet-stretcher and tacker.....	Z. A. Ward.....	145,604	Dec. 16, 1873	514	169	4	651
Carpet-sweeper.....	W. Miller.....	140,293	June 24, 1873	788	250	3	704
Carpet-sweeper.....	H. A. Palmer and A. H. Spencer.....	146,016	Dec. 30, 1873	905	293	4	705
Carriage.....	H. E. Delessert.....	141,704	Aug. 12, 1873	271	88	4	165
Carriage.....	L. Glesenkamp.....	137,914	Apr. 15, 1873	580	182	3	429
Carriage.....	T. B. Patten.....	135,287	Jan. 28, 1873	742	239	3	107
Carriage.....	G. K. Tichenor.....	142,531	Sept. 2, 1873	188	61	4	257
Carriage.....	F. M. Watson.....	141,190	July 22, 1873	787	257	4	100
Carriage and wagon seat.....	C. K. Lehmann.....	143,515	Oct. 7, 1873	97	34	4	388
Carriage-axle.....	S. S. Cook.....	145,280	Dec. 9, 1873	220	75	4	616
Carriage-axle and axle-box.....	B. A. Berryman.....	135,068	Jan. 21, 1873	534	173	3	78
Carriage axle-tree, Gage for setting.....	L. D. Cross.....	136,819	Mar. 18, 1873	432	143	3	298
Carriage-axles, Machine for rolling.....	J. C. Richardson.....	136,620	Mar. 11, 1873	252	85	3	275
Carriage-axles, Machine for rolling.....	J. C. Richardson.....	145,526	Dec. 16, 1873	451	{ 147 } { 148 }	4	645
Carriage-axles, Machine for turning.....	H. E. Forrest.....	137,769	Apr. 15, 1873	459	143	3	418
Carriage-axles, Machine for turning.....	W. Jones.....	144,908	Nov. 25, 1873	643	219	4	564
Carriage-axles, Manufacture of.....	{ J. C. and J. Lones, C. Vernon, } { and E. Holden. }	145,510	Dec. 16, 1873	433	{ 141 } { 142 }	4	644
Carriage-axle, Manufacture of.....	A. and J. Schirck and J. Smith.....	136,460	Mar. 4, 1873	89	31	3	253
Carriage, Baby.....	C. H. Amidon.....	134,623	Jan. 7, 1873	114	37	3	16
Carriage, Baby.....	S. McIntire.....	136,607	Mar. 11, 1873	240	81	3	274
Carriage-bolt.....	I. Newton.....	141,661	Aug. 12, 1873	237	74	4	162
Carriage-bolts, Die for making.....	E. H. Plant.....	137,023	Mar. 18, 1873	602	199	3	312
Carriage, Child's.....	A. F. R. Arndt.....	143,803	Oct. 21, 1873	395	131	4	430
Carriage, Child's.....	J. A. Bechler.....	134,630	Jan. 7, 1873	121	39, 40	3	16
Carriage, Child's.....	R. G. Britton.....	135,764	Feb. 11, 1873	348	{ 111 } { 112 }	3	167
Carriage, Child's.....	J. A. Crandall.....	134,856	Jan. 14, 1873	334	107	3	47
Carriage, Child's.....	T. Galt.....	138,746	May 13, 1873	260	81	3	528
Carriage, Child's.....	T. Galt.....	143,818	Oct. 21, 1873	406	135	4	431
Carriage, Child's.....	L. Havasy.....	143,624	Oct. 14, 1873	210	71	4	406
Carriage, Child's.....	J. N. Hazelip.....	145,298	Dec. 9, 1873	237	80	4	617
Carriage, Child's.....	J. G. Kamphaus.....	143,628	Oct. 14, 1873	212	72	4	406
Carriage, Child's.....	H. M. Richardson.....	143,421	Oct. 7, 1873	23	9	4	382
Carriage, Child's.....	G. L. Shepard.....	140,598	July 8, 1873	235	79	4	39
Carriage, Child's.....	L. Snow and J. Haseltine.....	145,692	Dec. 16, 1873	589	193	4	657
Carriage, Child's.....	F. Snyder.....	139,978	June 17, 1873	495	156	3	672
Carriage, Child's.....	W. H. Towers.....	144,166	Oct. 28, 1873	723	241	4	467
Carriage, Child's.....	J. B. Wightman.....	134,576	Jan. 7, 1873	71	22	3	12
Carriage-clip die.....	E. Meeker.....	142,804	Sept. 16, 1873	436	147	4	299
Carriage-clip forming-machine.....	W. S. Ward.....	137,517	Apr. 1, 1873	218	67	3	374
Carriage-clip swaging-die.....	R. R. Miller.....	139,413	May 27, 1873	875	280	3	599
Carriage-cover.....	E. H. Elliott.....	144,193	Nov. 4, 1873	20	6	4	480
Carriage-curtain.....	H. Donnell.....	134,862	Jan. 14, 1873	340	108	3	47
Carriage-curtain fastener.....	H. Drake.....	139,663	June 10, 1873	204	67	3	642
Carriage-curtain fastener.....	W. M. Terry.....	139,438	May 27, 1873	895	288	3	601
Carriage-curtain fastening.....	F. Baumgartner.....	145,328	Dec. 9, 1873	266	89	4	619
Carriage-curtain fastening.....	J. H. Gleason.....	138,799	May 13, 1873	306	95	3	533
Carriage-curtain knob.....	C. M. Munson.....	140,723	July 8, 1873	338	114	4	47
Carriage, Dash-rail for.....	B. B. Noyes and O. G. Stratton.....	135,834	Feb. 11, 1873	414	134	3	171
Carriage, Dash-rail for child's.....	M. Hine.....	137,446	Apr. 1, 1873	149	48	3	369
Carriage-door.....	J. Carson.....	144,440	Nov. 11, 1873	236	79	4	509
Carriage-door.....	J. Cunningham.....	138,008	Apr. 22, 1873	675	214	3	446
Carriage foot-rail.....	T. W. and H. K. Porter.....	143,031	Sept. 23, 1873	633	216	4	326
Carriage for tramways, Steam.....	J. Grantham.....	142,459	Sept. 2, 1873	122	39	4	252
Carriage holdback.....	D. Terry.....	143,199	Sept. 23, 1873	763	263	4	337
Carriage-hook, Landau.....	O. S. Osborn.....	139,515	June 3, 1873	62	21	3	614
Carriage-iron.....	H. K. Porter.....	146,093	Dec. 30, 1873	972	314	4	711
Carriage-jack.....	D. Hiestand.....	137,202	Mar. 25, 1873	777	256	3	337
Carriage-jack.....	D. R. Wight.....	145,922	Dec. 23, 1873	801	262	4	686
Carriage-lock plate-blanks, Machine for cutting.....	T. Insull and J. F. Dovey.....	142,854	Sept. 16, 1873	476	162	4	303
Carriage, Manufacture of rub-irons for.....	H. W. Oliver, jr.....	136,857	Mar. 18, 1873	461	153	3	301
Carriage-offsets or stay-ends, Die for forging.....	D. Wilcox.....	144,375	Nov. 4, 1873	169	56, 57	4	492
Carriage-pole tip.....	S. Mason.....	145,885	Dec. 23, 1873	768	251	4	684
Carriage-protector.....	G. B. Brown.....	139,364	May 27, 1873	823	263	3	595
Carriage running-gear.....	R. Kline and R. M. Jack.....	139,164	May 20, 1873	643	201	3	573

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Carriage running-gear.....	J. L. Ware.....	136,570	Mar. 4, 1873	196	65	3	261
Carriage-seat.....	C. K. Mellinger.....	134,692	Jan. 7, 1873	182	60	3	21
Carriage-seat.....	J. N. Miller.....	141,065	July 22, 1873	665	224	4	91
Carriage-seat fastener.....	M. Brockway, jr.....	140,572	July 8, 1873	213	71	4	37
Carriage-seat, Shifting-rail for.....	H. Dressel.....	141,335	July 29, 1873	930	303	4	120
Carriage shaft-holding attachment.....	A. C. Maxfield.....	143,582	Oct. 14, 1873	173	58	4	403
Carriage-spring.....	J. Bullock.....	145,333	Dec. 9, 1873	270	90	4	619
Carriage-spring.....	J. Curtis.....	144,514	Nov. 11, 1873	293	99	4	514
Carriage-spring.....	C. S. S. Griffing.....	137,197	Mar. 25, 1873	772	255	3	336
Carriage-spring.....	C. F. Hall.....	138,247	Apr. 29, 1873	915	288	3	473
Carriage-spring.....	G. W. Harlan.....	142,627	Sept. 9, 1873	276	91	4	276
Carriage-spring.....	G. Hopson.....	143,576	Oct. 14, 1873	168	56	4	403
Carriage-spring.....	T. Murgatroyd.....	139,325	May 27, 1873	794	253	3	593
Carriage-spring.....	J. W. Post.....	134,703	Jan. 7, 1873	192	62	3	22
Carriage-spring.....	J. D. Richardson.....	138,438	Apr. 29, 1873	1,086	343	3	487
Carriage-spring.....	R. Walker.....	145,374	Dec. 9, 1873	299	101	4	622
Carriage-spring.....	J. B. Whitcomb.....	136,116	Feb. 18, 1873	666	218	3	205
Carriage-spring.....	T. H. Wood.....	139,348	May 27, 1873	811	259	3	594
Carriage-spring clip.....	D. W. Baird.....	139,648	June 10, 1873	193	63	3	641
Carriage-spring, Clip-plate for.....	N. C. Dean.....	134,859	Jan. 14, 1873	336	108	3	47
Carriage-step.....	G. A. Keene.....	135,815	Feb. 11, 1873	401	129	3	170
Carriage-step.....	C. H. Gould.....	137,547	Apr. 8, 1873	252	77	3	389
Carriage-top.....	G. Bockstaller.....	139,450	June 3, 1873	3	1	3	609
Carriage-top.....	C. A. Dearborn.....	144,069	Oct. 28, 1873	644	212	4	461
Carriage-top.....	D. B. Dorsey.....	145,730	Dec. 23, 1873	634	208	4	673
Carriage-top.....	J. N. Gill.....	144,612	Nov. 18, 1873	388	130	4	533
Carriage-top.....	W. I. Peck.....	141,377	July 29, 1873	976	317	4	123
Carriage-top.....	H. Sayler.....	144,704	Nov. 18, 1873	464	157	4	539
Carriage-top.....	J. H. Snyder.....	142,050	Aug. 19, 1873	594	195	4	200
Carriage-top.....	G. H. Young.....	139,225	May 20, 1873	693	218	3	577
Carriage-top joint.....	J. H. Combs.....	143,669	Oct. 14, 1873	246	83	4	409
Carriage-top joint.....	W. B. C. Stirling and J. W. Pohlman.....	145,135	Dec. 2, 1873	93	30	4	593
Carriage-top prop.....	W. P. Elam.....	145,935	Dec. 30, 1873	835	272	4	699
Carriage, Top-prop for.....	L. W. Blessing.....	142,889	Sept. 16, 1873	504	172	4	305
Carriage-top setter.....	J. Poffenbarger.....	143,183	Sept. 23, 1873	748	258 259	4	336
Carriage-tops, Concealed jointed brace for.....	D. W. Baird.....	143,316	Sept. 30, 1873	871	298	4	362
Carriage-wheel.....	H. Gwynn.....	145,646	Dec. 16, 1873	550	181	4	654
Carriage-wheel to axle, Securing.....	H. S. Fischer and D. Bruhn.....	135,327	Jan. 28, 1873	778	252	3	110
Carriage-window.....	J. Hensgen and E. Kruger.....	142,229	Aug. 26, 1873	761	250	4	223
Carrier: <i>See</i> Egg-carrier. Hay-carrier. Lathe-carrier.							
Cart, Dumping.....	B. G. Fitzhugh.....	138,013	Apr. 22, 1873	680	215	3	446
Cart, Dumping.....	B. G. Fitzhugh.....	140,025	June 17, 1873	536	169	3	675
Cart, Excavating.....	W. Harles.....	135,546	Feb. 4, 1873	143	45	3	139
Cart-loading apparatus.....	B. G. Fitzhugh.....	137,768	Apr. 15, 1873	456	142 143	3	418
Cart, Self-loading.....	R. B. Cantrell.....	138,854	May 13, 1873	356	110	3	537
Cartridge.....	J. Logan and G. E. Hart.....	142,924	Sept. 16, 1873	533	182	4	308
Cartridge-box.....	T. F. Brabson.....	138,847	May 13, 1873	350	108	3	536
Cartridge-box.....	W. H. Elliott.....	139,885	June 17, 1873	422	131	3	666
Cartridge-box.....	S. McKeever.....	139,846	June 10, 1873	377	117	3	655
Cartridge-box.....	S. McKeever.....	139,847	June 10, 1873	378	117	3	655
Cartridge-capping and uncapping device.....	G. S. Greene, jr.....	137,071	Mar. 25, 1873	657	218	3	328
Cartridge-capping and uncapping device.....	G. V. McGraw.....	140,718	July 8, 1873	335	113	4	47
Cartridge-capping and uncapping device.....	J. F. Nettleton.....	138,180	Apr. 22, 1873	828	263	3	458
Cartridge-capping implement.....	H. M. Bronson.....	144,435	Nov. 11, 1873	231	78	4	509
Cartridge-capping tool.....	J. L. Raub.....	137,720	Apr. 8, 1873	406	124	3	401
Cartridge-capping, uncapping, and charging implement.....	W. M. Fowler.....	142,157	Aug. 26, 1873	701	231	4	219
Cartridge caps, &c., Forming metallic case for.....	S. W. Wood.....	144,010	Oct. 28, 1873	595	197	4	457
Cartridge-case, Metallic.....	S. W. Wood.....	144,012	Oct. 28, 1873	597	197	4	457
Cartridge-ejector for revolving fire-arm.....	J. T. and G. M. Smith, and J. J. Sweeney.....	136,871	Mar. 18, 1873	470	156	3	301
Cartridge, Electrical gun.....	T. P. Mott and S. Gardiner, jr.....	138,679	May 6, 1873	189	60	3	513
Cartridge for fire-arms.....	T. T. S. Laidley.....	140,144	June 24, 1873	664	208	3	694
Cartridge for fire-arms.....	S. W. Wood.....	144,011	Oct. 28, 1873	596	197	4	457
Cartridge-holder.....	L. J. Gaines.....	136,987	Mar. 18, 1873	570	190	3	309
Cartridge-loading device.....	T. L. Sturtevant.....	141,185	July 22, 1873	782	256	4	100
Cartridge-loading machine.....	A. C. Hobbs.....	135,913	Feb. 18, 1873	494	160	3	192
Cartridge-loading machine.....	T. L. Sturtevant.....	138,294	Apr. 29, 1873	962	302	3	477
Cartridge-magazine blocks to fire-arms, Attaching.....	H. Metcalfe.....	143,415	Oct. 7, 1873	19	8	4	382
Cartridge, Metallic.....	B. Burton.....	136,130	Feb. 25, 1873	697	226	3	220
Cartridge, Metallic.....	I. M. Milbank.....	136,168	Feb. 25, 1873	729	235	3	222
Cartridge of fusible metal, &c.....	W. H. Tooth.....	136,468	Mar. 4, 1873	100	.....	3	254
Cartridge-retractor for revolving fire-arm.....	W. Clews.....	136,134	Feb. 25, 1873	702	227	3	220
Cartridge-shell with bullets, Machine for interlocking.....	A. C. Hobbs.....	143,981	Oct. 28, 1873	565	188	4	454
Cartridge, Shot.....	S. W. Paine.....	136,336	Feb. 25, 1873	871	281	3	233
Carving-machine.....	H. Cottrell.....	144,745	Nov. 18, 1873	497	169	4	542
Carving-machine.....	H. Grubenbecher.....	137,837	Apr. 15, 1873	517	161	3	423
Carving-machine.....	H. Thomas.....	139,980	June 17, 1873	496	157	3	672
Case: <i>See</i> Blacking-case. Book-case. Burial-case. Card-case. Cartridge-case. Corn-sheller case. Filing-case. Folding-case. Jewel-case. Lace and ribbon case. Medicine-case.							

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Pen and pencil case.							
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Ribbon-case.							
Sample-case.							
Sewing-case.							
Show-case.							
Spool-case.							
Spool-exhibiting case.							
Ticket-case.							
Tobacco-case.							
Valve-case.							
Watch-case.							
Wood-case.							
Casing-spear	V. Gretter	143, 141	Sept. 23, 1873	717	246	4	333
Cask, &c., Beer-drawing attachment for	S. Marks	144, 119	Oct. 28, 1873	683	226	4	464
Cask, Brewer's stocking	J. Jakel	141, 354	July 29, 1873	956	311	4	121
Cask, Construction of metallic	J. I. Bard	137, 590	Apr. 8, 1873	288	89	3	392
Cask-pitching apparatus	F. Brenner	137, 173	Mar. 25, 1873	747	247	3	334
Casks, barrels, &c., Apparatus for pitching	G. Meyer and J. Dick	141, 449	Aug. 5, 1873	35	11	4	138
Cast ring, Mandrel for holding tapered	G. E. Brettell	140, 113	June 24, 1873	637	200	3	692
Caster	S. Curtis	143, 334	Sept. 30, 1873	886	303	4	363
Caster	J. Toler	139, 212	May 20, 1873	683	215	3	576
Caster	G. W. Wiatt	145, 769	Dec. 23, 1873	670	218	4	676
Caster-attachment for furniture	J. H. Travis	140, 097	June 17, 1873	603	190	3	681
Caster, Furniture	G. H. Glad	144, 530	Nov. 11, 1873	309	104	4	515
Caster, Furniture	J. Johnson	136, 522	Mar. 4, 1873	153	49	3	257
Caster, Furniture	J. Parry	135, 286	Jan. 28, 1873	742	239	3	107
Caster, Furniture	C. B. Sheldon	137, 249	Mar. 25, 1873	818	268	3	340
Caster, Furniture	C. B. Sheldon	137, 250	Mar. 25, 1873	819	269	3	340
Caster, Furniture	C. B. Sheldon	137, 251	Mar. 25, 1873	820	269	3	340
Caster, Furniture	C. B. Sheldon	137, 728	Apr. 8, 1873	412	126	3	402
Caster, Furniture	C. B. Sheldon	139, 619	June 3, 1873	151	50	3	621
Caster, Salt and pepper	J. Bird	142, 670	Sept. 9, 1873	314	104	4	279
Caster, Sewing-machine	E. R. Clark	142, 615	Sept. 9, 1873	268	88	4	275
Caster, Sewing-machine	J. B. Lincoln	137, 141	Mar. 25, 1873	717	238	3	332
Caster, Sewing-machine	J. H. Plank	139, 606	June 3, 1873	140	46	3	620
Caster, Sewing-machine	G. K. Proctor	139, 608	June 3, 1873	142	46, 47	3	620
Caster, Sewing-machine	J. K. Proctor	145, 011	Nov. 25, 1873	730	246	4	572
Caster, Sewing-machine	J. Robertson	141, 236	July 29, 1873	840	274	4	112
Caster, Sewing-machine	J. E. Smith	143, 387	Sept. 30, 1873	937	317	4	367
Caster-stand	G. D. Dudley	134, 738	Jan. 14, 1873	232	75	3	39
Caster, Table	H. Fachs	142, 905	Sept. 16, 1873	517	176	4	306
Caster, Table	T. Shaw	137, 248	Mar. 25, 1873	818	268	3	340
Caster, Table	C. B. Sheldon	141, 390	July 29, 1873	989	321	4	124
Caster, Wheel for furniture	C. B. Sheldon	140, 310	June 24, 1873	804	255	3	706
Caster, Wheel for furniture	C. B. Sheldon	140, 311	June 24, 1873	804	255	3	706
Casting molds, Mold for	J. S. Elliott	137, 901	Apr. 15, 1873	571	179	3	428
Castings, Tumbling-barrel for cleaning	F. N. Bixby	137, 409	Apr. 1, 1873	115	38	3	366
Caterpillars, Compound for destroying	G. F. Whisenant	134, 959	Jan. 14, 1873	424	.....	3	54
Cattle, Apparatus for supplying salt to	F. Stamberger	137, 390	Apr. 1, 1873	100	32	3	365
Cattle-blinder	M. Backmayr	138, 224	Apr. 29, 1873	891	281	3	471
Cattle-guard, Railway	G. W. Newton	137, 021	Mar. 18, 1873	600	199	3	312
Cattle-stanchion	C. W. Sawdey	144, 360	Nov. 4, 1873	158	52	4	491
Ceiling and floor, Fire-proof	J. W. Bassett	138, 118	Apr. 22, 1873	773	247	3	454
Cellars, water-closets, &c., Apparatus for emptying	R. Boeklen	142, 200	Aug. 26, 1873	737	243	4	221
Cement, Compound for hydraulic	A. Pfund	135, 582	Feb. 4, 1873	179	.....	3	141
Cement-lined pipe	M. Stephens	137, 970	Apr. 15, 1873	627	197	3	432
Cement-lined pipe	M. Stephens	142, 528	Sept. 2, 1873	184	60	4	256
Cement, Manufacture of	J. E. Park	138, 924	May 13, 1873	412	.....	3	541
Cement, Manufacture of artificial hydraulic	W. B. Tucker	138, 770	May 13, 1873	281	.....	3	530
Cement, Rubber	W. Moshier	138, 917	May 13, 1873	406	.....	3	541
Center-board for vessel	J. Call	142, 677	Sept. 9, 1873	319	106	4	280
Center-board for vessel	J. Espalla	144, 968	Nov. 25, 1873	694	234	4	569
Centrifugal machine	E. J. M. Becker	139, 108	May 20, 1873	583	183	3	568
Centrifugal machine	C. T. Burchardt	136, 485	Mar. 4, 1873	115	38	3	255
Centrifugal machine	J. Sparrow	138, 705	May 6, 1873	211	66	3	514
Centrifugal machine for draining sugar	P. Cramer	144, 319	Nov. 4, 1873	122	41	4	488
Centrifugal machine for draining sugar	C. Fischer	144, 752	Nov. 18, 1873	503	171	4	542
Centrifugal machine for purifying sugar	H. Prieu	135, 727	Feb. 11, 1873	316	100	3	164
Cess-pool cleaning apparatus	W. C. McCarthy	138, 034	Apr. 22, 1873	704	{ 222 223 }	3	448
Cess-pool, sink, &c., Apparatus for cleaning	J. P. F. Datchy	142, 840	Sept. 16, 1873	466	158	4	302
Chain, Box-slide for ornamental	O. J. Valentine	136, 946	Mar. 18, 1873	536	177	3	306
Chain for cart-saddle, Back	W. B. McClure	135, 235	Jan. 28, 1873	699	224	3	104
Chain-link, Machine for making ornamental	E. I. Levavasseur	138, 413	Apr. 29, 1873	1,061	334	3	485
Chain-link, Ornamental	J. J. Freeman	136, 594	Mar. 11, 1873	231	78	3	273
Chain-links, Machine for bending	C. B. Long	145, 511	Dec. 16, 1873	436	142	4	644
Chain-links, Machine for bending	D. Roy	145, 072	Dec. 2, 1873	29	10	4	588
Chain-machine	G. W. Binnix	137, 408	Apr. 1, 1873	114	38	3	366
Chain-machine	J. Daykin and W. B. Case	143, 968	Oct. 28, 1873	552	{ 183 184 }	4	453
Chain-machine	B. Hershey	139, 151	May 20, 1873	626	196	3	571
Chain-machine	F. Leonard	140, 583	July 8, 1873	220	74	4	37
Chain-machine	F. Leonard	145, 063	Dec. 2, 1873	21	7, 8	4	587
Chain-making machine	L. Souther	141, 734	Aug. 12, 1873	294	96	4	167
Chain, Ornamental	W. F. Davis	142, 841	Sept. 16, 1873	467	158	4	302
Chains, Method of fastening blocks in triple	P. Kendrick	142, 110	Aug. 26, 1873	662	217	4	215
Chair:							
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Dental chair.							
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Knock-down chair.							
Ladder-chair.							
Oscillating-chair.							
Photograph-chair.							
Railway-chair.							
Reclining-chair.							
Rocking-chair.							
School-chair.							
Sewing-machine chair.							
Tilting-chair.							
Tip-chair.							
Chair	L. H. Baker	134, 834	Jan. 14, 1873	317	101	3	45
Chair	J. Banghman and B. R. Chalk	136, 956	Mar. 18, 1873	543	179	3	307
Chair	W. T. Doremus	139, 948	June 17, 1873	473	149	3	670
Chair	G. Feldkamp	144, 080	Oct. 28, 1873	652	{ 214 215 }	{ 4 4 }	{ 462 462 }
Chair	W. Gardner	139, 568	June 3, 1873	107	36	3	617
Chair	H. S. Hale	146, 065	Dec. 30, 1873	947	305	4	708
Chair	L. Heywood	134, 545	Jan. 7, 1873	38	12	3	10
Chair	J. Morrison and H. M. Hutchinson	144, 349	Nov. 4, 1873	147	49	4	490
Chair	J. K. Rowley	138, 939	May 13, 1873	424	133	3	542
Chair	J. B. Poe	141, 948	Aug. 19, 1873	498	164	4	193
Chair and basket splint, Machine for making	G. C. Taylor	142, 418	Sept. 2, 1873	84	28	4	249
Chair and secretary, Combined	B. F. Green	140, 363	July 1, 1873	24	8	4	10
Chair and step-ladder, Combined	P. J. & J. H. Welsh	138, 826	May 13, 1873	330	101	3	535
Chair, Attachable rocker for	C. Kilburn	134, 896	Jan. 14, 1873	370	117	3	50
Chair-back, Bow for	G. F. Ellis	136, 824	Mar. 18, 1873	435	144	3	299
Chair-brace	E. Collins	134, 733	Jan. 14, 1873	229	73	3	39
Chair, Foot-rest for	G. Gardner	142, 625	Sept. 9, 1873	275	90	4	276
Chair-frame	L. Heywood and E. E. Horton	134, 544	Jan. 7, 1873	38	12	3	10
Chair-frame	M. Wilcox and C. Depledge	145, 036	Nov. 25, 1873	756	255	4	574
Chair-rocker	J. P. Sinclair	141, 295	July 29, 1873	894	293	4	117
Chair-seat	W. T. Doremus	134, 593	Jan. 7, 1873	89	28	3	14
Chair seat and back	W. T. Doremus	135, 973	Feb. 18, 1873	540	179	3	196
Chair, &c., Seat for	G. Gardner	142, 624	Sept. 9, 1873	274	90	4	276
Chair seat or back	R. W. Myers	141, 374	July 29, 1873	974	316	4	123
Chair seat or back	W. T. Doremus	144, 020	Oct. 28, 1873	603	199	4	457
Chair-spring, &c.	W. T. Doremus	144, 664	Nov. 18, 1873	430	145	4	536
Chair, &c., Spring	H. Martindale	134, 691	Jan. 7, 1873	182	59	3	21
Chair, table, and bureau, Combined	J. Croghan	137, 062	Mar. 25, 1873	647	215	3	327
Chair, table, and lounge, Combined	N. L. Bradley	134, 585	Jan. 7, 1873	81	26	3	13
Chandelier	J. Kintz	139, 066	May 20, 1873	546	172	3	565
Chandelier	J. Kintz	142, 165	Aug. 26, 1873	707	233	4	219
Chandelier center	L. Hull	142, 107	Aug. 26, 1873	660	217	4	215
Chandelier, Extension	J. Aulbach	142, 189	Aug. 26, 1873	726	240	4	221
Chandelier, Lamp	G. F. Blaisse	140, 003	June 17, 1873	516	164	3	674
Chandelier, Sliding	J. Braunen	140, 459	July 1, 1873	96	33	4	16
Chandelier, Sliding or extension	A. W. Wood	140, 986	July 15, 1873	585	197	4	75
Change gate	L. Bauer	137, 404	Apr. 1, 1873	110	36	3	366
Channeling and edging tool	A. Ernst	136, 229	Feb. 25, 1873	775	.....	3	226
Charcoal used in rectifying spirits, Revivifying	C. L. Fleischmann	136, 147	Feb. 25, 1873	713	.....	3	221
Charcoal used in rectifying spirits, Revivifying	J. M. Curless	141, 205	July 29, 1873	810	265	4	110
Check, Baggage	J. F. Gaunt	139, 780	June 10, 1873	322	100	3	650
Check-box, Conductor's	H. W. Burress	135, 075	Jan. 21, 1873	539	175	3	79
Check-hook	A. V. M. Sprague	140, 555	July 1, 1873	182	62	4	23
Check-hook	J. Haggerty	142, 160	Aug. 26, 1873	704	232	4	219
Check-runner	J. Locke	138, 903	May 13, 1873	395	124	3	540
Cheese-cutter							
Cheese, fruit, &c., press	B. G. Martin	134, 910	Jan. 14, 1873	382	{ 121 122 }	{ 3 3 }	{ 51 51 }
Cheese-hook	G. B. Boomer	135, 514	Feb. 4, 1873	108	34	3	136
Cheese, Process for making	H. O. Freeman	136, 051	Feb. 18, 1873	608	.....	3	201
Cheese skipper-extractor	C. Green	135, 542	Feb. 4, 1873	139	44	3	138
Cheese-vat	D. F. Barclay	140, 670	July 8, 1873	293	99	4	43
Cherry-stoner	E. Buck and E. W. Kirk	144, 887	Nov. 25, 1873	629	214	4	563
Cherry-stoner	J. S. Lash	141, 649	Aug. 12, 1873	225	71	4	161
Cherry-stoner	D. C. Warner	135, 050	Jan. 21, 1873	521	168	3	77
Chest-protector	E. F. Wilder	137, 275	Mar. 25, 1873	840	276	3	342
Chest-protector and shirt-bosom support, Combined	J. A. Aston and C. C. McMurphy	142, 366	Sept. 2, 1873	40	14	4	245
Chevron	F. S. Johnston	135, 124	Jan. 21, 1873	576	{ 187 188 }	{ 3 3 }	{ 81 81 }
Child's chair	R. Ardrey	145, 829	Dec. 23, 1873	716	235	4	680
Child's chair	J. F. Downing	138, 620	May 6, 1873	132	43	3	508
Child's chair	J. F. Downing	140, 900	July 15, 1873	497	{ 167 168 }	{ 4 4 }	{ 68 68 }
Child's chair	J. F. Harris and E. D. Childs	137, 610	Apr. 8, 1873	305	94, 95	3	393
Chimney	J. Browell	137, 412	Apr. 1, 1873	118	39	3	366
Chimney and fire-place	J. Briggs	139, 111	May 20, 1873	586	184	3	568
Chimney-cap	T. Boyd	141, 107	July 22, 1873	704	236	4	94
Chimney-cowl	J. Burgy	141, 541	Aug. 5, 1873	114	36	4	144
Chimney-cowl	G. H. Garderwine	142, 909	Sept. 16, 1873	521	177	4	307
Chimney-cowl	W. H. Myers	137, 561	Apr. 8, 1873	263	81	3	390
Chimney-cowl	J. H. Richardson	139, 080	May 20, 1873	561	176	3	566
Chimney-furnace	L. White	143, 739	Oct. 14, 1873	319	106	4	414
Chimney or globe-holder	R. Wright and J. H. Race	141, 478	Aug. 5, 1873	61	19	4	140
Chimney-top	J. C. H. Brown	145, 621	Dec. 16, 1873	528	173	4	652
Chimney-top	J. Gorton	136, 234	Feb. 25, 1873	778	251	3	226
Chimney-top	H. Palmer	134, 700	Jan. 7, 1873	190	61	3	22
Chimney-top	G. Wingate	144, 586	Nov. 11, 1873	358	121	4	519
Chimney-top, revolving	C. L. Garfield	142, 225	Aug. 26, 1873	757	249	4	223

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Chimneys, guard for preventing leakage around	J. F. Schuyler	145, 245	Dec. 2, 1873	184	63	4	600
Chimneys, means of operating steamboat	J. Christy	136, 414	Mar. 4, 1873	53	19	3	250
Chimneys or flues, attachment to	J. E. Starnes	143, 540	Oct. 7, 1873	123	41	4	390
Chisel	C. E. L. Jelliffe	143, 413	Oct. 7, 1873	16	6	4	382
Chlorine, manufacture of	H. Deacon	141, 333	July 29, 1873	929	.....	4	120
Chocolate, manufacture of	J. M. O. Tamin	141, 832	Aug. 12, 1873	386	.....	4	174
Chocolate, soluble	J. Corell	138, 007	Apr. 22, 1873	675	.....	3	446
Chopper:							
<i>See</i> Cotton-chopper.							
Meat-chopper.							
Stalk-chopper.							
Chuck	T. R. Almond	141, 978	Aug. 19, 1873	520	172	4	194
Chuck	E. Horton	142, 163	Aug. 26, 1873	706	233	4	219
Chuck	L. Parmelee	144, 128	Oct. 28, 1873	690	229	4	465
Chuck	J. H. Westcott	136, 349	Feb. 25, 1873	885	284	3	234
Chuck, Centering	G. H. Miller	142, 642	Sept. 9, 1873	288	94	4	277
Chuck, Drill	L. Parmelee	143, 377	Sept. 30, 1873	930	315	4	366
Chuck for holding pipe-fittings	M. Walty	141, 612	Aug. 5, 1873	177	56	4	149
Chuck for lathe and planer, Magnetic	J. A. Jaques, J. T. Oakley, and L. Sterne.	137, 875	Apr. 15, 1873	545	170	3	425
Chuck for sleigh-bells, Lathe	W. E. Barton	145, 383	Dec. 9, 1873	307	103	4	623
Chuck-jaw for lathe	M. C. Johnson	142, 239	Aug. 26, 1873	770	253	4	224
Chuck, Lathe	S. C. Goodsell	137, 674	Apr. 8, 1873	361	112	3	398
Chuck, Lathe	W. Johnson	141, 276	July 29, 1873	878	287	4	115
Chuck, Lathe	C. H. Reid	141, 817	Aug. 12, 1873	373	122	4	173
Chuck, Watch-maker's lathe	J. Stark	141, 824	Aug. 12, 1873	378	124	4	173
Chucks, Device for holding and carrying pipe-fittings.	A. J. Peavey and F. B. Cotton ..	145, 896	Dec. 23, 1873	777	254	4	684
Churn	E. Archer	141, 480	Aug. 5, 1873	62	20	4	140
Churn	J. Beckley	138, 604	May 6, 1873	118	39	3	507
Churn	J. Borton and W. H. Hartley ..	135, 761	Feb. 11, 1873	345	111	3	167
Churn	J. L. and T. R. Britt	143, 612	Oct. 14, 1873	199	67	4	405
Churn	G. G. Buchanan	144, 437	Nov. 11, 1873	233	78	4	509
Churn	J. P. Friest	144, 755	Nov. 18, 1873	507	172	4	542
Churn	A. W. Fuqua	141, 709	Aug. 12, 1873	274	89	4	165
Churn	H. A. Hincheer	137, 369	Apr. 1, 1873	81	27	3	363
Churn	W. H. Holdam	138, 089	Apr. 22, 1873	752	238	3	452
Churn	J. Masten	143, 919	Oct. 21, 1873	489	165	4	438
Churn-dash	A. J. Hudson	145, 107	Dec. 2, 1873	62	20	4	590
Churn-dasher	G. W. Barker	145, 272	Dec. 9, 1873	215	74	4	615
Churn-dasher	D. Boyd	145, 985	Dec. 30, 1873	878	284	4	703
Churn-dasher	W. M. Combes	136, 035	Feb. 18, 1873	595	195	3	200
Churn-dasher	I. B. Compton	143, 559	Oct. 14, 1873	154	52	4	401
Churn-dasher	G. W. McCormick	139, 406	May 27, 1873	870	278	3	599
Churn-dasher	G. Ridler	144, 290	Nov. 4, 1873	99	33	4	486
Churn-dasher	H. B. Robinson	145, 592	Dec. 16, 1873	504	166	4	650
Churn-dasher, Reciprocating	T. Earle	142, 007	Aug. 19, 1873	547	181	4	197
Churn-motor	J. B. Sweetland	139, 208	May 20, 1873	680	213	3	576
Churn-power	W. A. Lewis	136, 925	Mar. 18, 1873	518	171	3	305
Churn, Reciprocating	E. Barrett and G. W. Fennimore.	140, 871	July 15, 1873	468	158	4	66
Churn, Reciprocating	L. I. Bodenhamer	140, 880	July 15, 1873	476	161	4	66
Churn, Reciprocating	G. B. Coan	139, 658	June 10, 1873	201	66	3	641
Churn, Reciprocating	H. Hatch	142, 102	Aug. 26, 1873	655	215	4	215
Churn, Reciprocating	G. M. Heim	138, 888	May 13, 1873	384	120	3	539
Churn, Reciprocating	A. D. Huntley	143, 906	Oct. 21, 1873	479	161	4	437
Churn, Reciprocating	L. B. Keeler	140, 280	June 24, 1873	779	247	3	703
Churn, Reciprocating	M. Litt	138, 168	Apr. 22, 1873	815	259	3	457
Churn, Reciprocating	M. W. Staples	140, 796	July 15, 1873	405	138	4	60
Churn, Reciprocating	W. M. Thompson and J. L. Mahurin.	140, 445	July 1, 1873	85	30	4	15
Churn, Reciprocating	E. T. Wheeler	143, 800	Oct. 21, 1873	393	129	4	430
Churn, Rotary	W. Brand and G. Puder	140, 112	June 24, 1873	636	200	3	692
Churn, Rotary	W. H. Bunch	141, 692	Aug. 12, 1873	262	85	4	164
Churn, Rotary	F. E. Clarkson	138, 229	Apr. 29, 1873	896	283	3	472
Churn, Rotary	B. Eason	136, 226	Feb. 25, 1873	772	250	3	226
Churn, Rotary	E. A. Hewitt	141, 348	July 29, 1873	949	308	4	121
Churn, Rotary	W. McClure	135, 281	Jan. 28, 1873	738	238	3	107
Churn, Rotary	G. Walker	139, 345	May 27, 1873	809	258	3	594
Chute, Lumber	W. Van Name and J. A. Wakefield.	135, 302	Jan. 28, 1873	754	243	3	108
Cider and wine mill	A. McCreight and R. W. Glasgow.	136, 847	Mar. 18, 1873	454	150	3	300
Cider, Article of food from	S. W. Mahan	143, 918	Oct. 21, 1873	488	.....	4	438
Cider-mill	N. E. Miller	141, 582	Aug. 5, 1873	146	47	4	147
Cider-mill	W. Rice	139, 615	June 3, 1873	149	49	3	621
Cider-mill	L. O. Rockwood	139, 975	June 17, 1873	492	156	3	672
Cider-mill	J. E. Saugi	135, 370	Jan. 28, 1873	819	265	3	113
Cider-mill	M. P. Schenck	138, 533	May 6, 1873	59	20	3	502
Cider-mill grater	W. Barr	139, 105	May 20, 1873	581	182	3	568
Cider-press lever	H. Peters	138, 280	Apr. 29, 1873	945	298	3	476
Cider, Putting up and preserving	M. Halstead and J. L. Wheeler ..	136, 914	Mar. 18, 1873	508	168	3	304
Cigar	E. B. Mead	140, 153	June 24, 1873	672	211	3	694
Cigar-box	H. Fowler	145, 290	Dec. 9, 1873	230	78	4	616
Cigar-box	E. C. Patterson	144, 129	Oct. 28, 1873	691	229	4	465
Cigar-box from redwood, Manufacture of	C. A. Hooper	145, 735	Dec. 23, 1873	640	.....	4	673
Cigar-bunch, Machine for pressing	G. Pierce	134, 768	Jan. 14, 1873	256	84	3	41
Cigar-bunch pressing and molding machine	W. D. Brewer	135, 030	Jan. 21, 1873	501	161	3	75
Cigar-bunch, Retainer for pressed and molded	W. D. Brewer	135, 031	Jan. 21, 1873	502	162	3	75
Cigar-bunches, Machine for making	S. Scholfield	140, 848	July 15, 1873	449	153	4	64
Cigar-bunches, Machine for making	D. A. Wightman	140, 860	July 15, 1873	459	156	4	65
Cigar-bunches, Machine for making	D. A. Wightman	140, 861	July 15, 1873	461	156	4	65
Cigar-bunching machine	H. B. Bunster	136, 411	Mar. 4, 1873	51	18	3	249
Cigar cutting and perforating machine	J. T. and A. Levy	137, 850	Apr. 15, 1873	527	164	3	424
Cigar-drying mold	N. W. Palmer	139, 517	June 3, 1873	63	21	3	614
Cigar-filler, Machine for pressing and shaping	C. H. Palmer	135, 243	Jan. 28, 1873	707	227	3	404
Cigar-fillers, Apparatus for arranging	S. Scholfield	140, 850	July 15, 1873	453	153	4	4

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Cigar-holder	T. J. Lewis	138, 032	Apr. 22, 1873	702	222	3	448
Cigar-machine	C. J. Delbridge	140, 896	July 15, 1873	491	166	4	68
Cigar-machine	T. Ernst	140, 906	July 15, 1873	504	{ 169 170 }	4	68
Cigar-machine	J. T. Hennaman	140, 501	July 1, 1873	135	46	4	19
Cigar-machine	S. Scholfield	140, 845	July 15, 1873	446	152	4	64
Cigar-machine	S. Scholfield	140, 846	July 15, 1873	447	152	4	64
Cigar-machine	H. E. Tylander	139, 280	May 27, 1873	760	241	3	590
Cigar-machine roll	D. A. Wightman	140, 859	July 15, 1873	458	156	4	65
Cigar-mold	N. Du Brul	142, 683	Sept. 9, 1873	323	108	4	280
Cigar-mold	T. D. McGuire	138, 672	May 6, 1873	183	58	3	512
Cigar-mold	F. C. Miller	135, 572	Feb. 4, 1873	165	53	3	140
Cigar-mold	C. H. Palmer	136, 615	Mar. 11, 1873	246	83	3	274
Cigar-mold clamp	S. Wilmot	136, 399	Mar. 4, 1873	42	15	3	249
Cigar-molding apparatus	T. J. Winship	137, 749	Apr. 8, 1873	434	134	3	403
Cigar-point splitter	A. Sickenberger	144, 570	Nov. 11, 1873	344	116	4	517
Cigar, Process of treating and drying	J. Cuddy	136, 490	Mar. 4, 1873	120	.....	3	255
Cigar-shaped pipe	S. N. Buynitzky	136, 487	Mar. 4, 1873	117	38	3	255
Cigar-tip	W. M. Herron	136, 514	Mar. 4, 1873	144	46	3	257
Cigar-tip cutter	F. Timm and T. Fantini	136, 285	Feb. 25, 1873	827	267	3	230
Cigar-trimmer	A. Cramer	140, 117	June 24, 1873	641	201	3	692
Cigar-trimmer	A. Hettinger	139, 152	May 20, 1873	628	196	3	572
Cigar-trimmer	S. Scholfield	140, 847	July 15, 1873	448	153	4	64
Cigar-wrappers, Apparatus for cutting	R. Appleby	137, 524	Apr. 8, 1873	231	71	3	387
Cigar-wrapping machine	S. Scholfield	140, 849	July 15, 1873	451	153	4	64
Cigarette-machine	J. D. S. Ruisecco	144, 478	Nov. 11, 1873	264	89, 90	4	511
Cigarettes, Device for making	H. Gericke	135, 110	Jan. 21, 1873	564	183	3	81
Cistern, Construction of	L. Howe	145, 802	Dec. 23, 1873	694	228	4	678
Cistern, Device for building	J. Kruger	142, 345	Sept. 2, 1873	20	7	4	244
Cisterns, &c., Rain-water switch and reversible valve for.	L. Goudreau	135, 035	Jan. 21, 1873	507	164	3	76
Clamp							
See Bale-tie clamp.							
Belt-clamp.							
Billiard-cue clamp							
Book-clamp.							
Book and paper clamp.							
Cigar-mold clamp.							
Clothes-clamp.							
Crimping-clamp.							
Dental-clamp.							
Floor-clamp.							
Joiner's-clamp.							
Pole-clamp.							
Rope-clamp.							
Sash and door clamp.							
Scaffold-pole clamp.							
Thill-coupling clamp.							
Watchmaker's-chain clamp.							
Clamp	C. S. Bonney	135, 882	Feb. 18, 1873	471	151	3	190
Clamp	L. Feely	142, 010	Aug. 19, 1873	549	{ 181 182 }	4	197
Clamp	F. M. Holmes	142, 697	Sept. 9, 1873	335	112	4	281
Clamp	N. J. Holt and J. Leach	140, 136	June 24, 1873	657	206	3	693
Clamp	W. H. Payne and H. Imhof	142, 938	Sept. 16, 1873	549	186	4	309
Clamp	J. E. Sinclair	140, 852	July 15, 1873	454	154	4	64
Clamping-device	C. Stout	139, 931	June 17, 1873	461	144	3	669
Clapboard-sawing machine	H. A. Holmes	142, 339	Sept. 2, 1873	15	6	4	243
Clasp:							
See Belt-clasp.							
Colter-clasp.							
Corset-clasp.							
Harness-clasp.							
Metallic clasp.							
Pocket-book clasp.							
Suspenders-clasp.							
Clasp	J. H. Eastman	145, 097	Dec. 2, 1873	55	17	4	590
Claw-bar	W. S. Terhune	137, 333	Apr. 1, 1873	54	16	3	361
Clay and cement, Pipe-mold	J. Sharpe	140, 734	July 8, 1873	346	117	4	48
Clay articles, Mold for forming	C. A. Fischer	140, 910	July 15, 1873	509	171	4	69
Clay-mill	J. A. Vaughn, H. B. Camp, and H. E. and C. J. Merrill.	145, 373	Dec. 9, 1873	298	101	4	622
Clay to form a plastic material, Mixing mineral and fossil substances with bitumenized.	P. Lea	144, 397	Nov. 11, 1873	198	.....	4	506
Cleaner:							
See Boiler-flue cleaner.							
Carpet-cleaner.							
Cotton-cleaner.							
Grain-cleaner.							
Grain and malt cleaner.							
Gun-cleaner.							
Knife-cleaner.							
Knife and fork cleaner.							
Lamp-chimney cleaner.							
Rice-cleaner.							
Sewer-cleaner.							
Slate-cleaner.							
Track-cleaner.							
Clevis bar and hook	R. Gibbs	139, 381	May 27, 1873	839	268	3	597
Clip:							
See Axle-clip.							
Carriage-clip.							
Carriage-spring clip.							
Curtain-tassel clip.							
Letter-clip.							

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Clip—continued.							
See Paper-clip.							
Wagon-axle skein clip.							
Clock, Alarm	D. M. Charters	143,881	Oct. 21, 1873	460	154	4	436
Clock, Calendar	C. M. Clinton and L. Mood	144,384	Nov. 11, 1873	188	64	4	505
Clock, Calendar	A. Frankfeld	143,618	Oct. 14, 1873	206	69	4	406
Clock, Calendar	N. T. Worthley	142,975	Sept. 16, 1873	580	196	4	312
Clock, Calendar movement	G. R. Williams	142,829	Sept. 16, 1873	457	155	4	301
Clock, Electric	F. J. Ritchie	143,847	Oct. 21, 1873	432	144	4	434
Clock, Escapement	C. Fasoldt	137,603	Apr. 8, 1873	300	93	3	393
Clock, Escapement	A. Platt	144,287	Nov. 4, 1873	97	32	4	486
Clock, Illuminated	E. Wade	139,839	June 10, 1873	372	115	3	654
Clock, Programme	S. F. Estell	143,230	Sept. 30, 1873	798	275	4	355
Clock-work globe	L. J. N. Mouret	140,065	June 17, 1873	575	182	3	679
Clocks, Striking works of	G. H. Leeds and C. N. Thorpe	139,166	May 20, 1873	644	201	3	573
Clod-crusher and harrow combined	W. Young and J. Wortham	142,755	Sept. 9, 1873	387	130	4	285
Clod-fender	A. L. Dirst	135,896	Feb. 18, 1873	481	155	3	191
Closet:							
See Earth-closet.							
Water-closet.							
Cloth cover, Painted	W. D. Richardson	142,868	Sept. 16, 1873	488	166	4	304
Cloth-cutting machine	I. Fenno	134,793	Jan. 14, 1873	278	90	3	42
Cloth-cutting machine	N. C. Fluck	144,023	Oct. 28, 1873	604	200	4	458
Cloth-cutting machine	J. Kent	136,602	Mar. 11, 1873	236	80	3	273
Cloth-finishing machines, Tray for	A. Woolson	141,192	July 22, 1873	787	258	4	100
Cloth folding and measuring machine	A. M. Cheney	136,967	Mar. 18, 1873	552	183	3	308
Cloth for cutting, Gage for marking	E. E. Emery	143,681	Oct. 14, 1873	262	87	4	410
Cloth, Machinery for finishing the nap of woolen	J. Dobson	144,839	Nov. 25, 1873	589	201	4	550
Cloth, Manufacture of felt	J. E. Pollard	143,528	Oct. 7, 1873	110	.....	4	389
Cloth-press, Steam	J. Dennis and C. H. Weston	142,006	Aug. 19, 1873	546	180	4	197
Cloth-steaming machine	H. S. Green	135,543	Feb. 4, 1873	140	44	3	138
Cloth-steaming machine	C. H. Weston	134,956	Jan. 14, 1873	421	135	3	54
Cloth stretching and drying machine	W. Bailey	139,038	May 20, 1873	517	163	3	563
Clothes-clamp	W. Tunstill	140,659	July 8, 1873	284	96	4	43
Clothes-drier	J. Burch and B. Webb	144,951	Nov. 25, 1873	680	230	4	567
Clothes-drier	E. S. French	135,107	Jan. 21, 1873	562	183	3	80
Clothes-drier	E. B. Gildersleeve	136,831	Mar. 18, 1873	441	146	3	299
Clothes-drier	A. Graves	140,193	June 24, 1873	706	222	3	697
Clothes-drier	A. S. Miller	142,714	Sept. 9, 1873	348	117	4	282
Clothes-drier	D. R. Watson	134,828	Jan. 14, 1873	313	99	3	45
Clothes-frame	J. C. Miller	146,087	Dec. 30, 1873	965	311	4	710
Clothes-line fastener	J. G. and P. A. Ames	140,234	June 24, 1873	738	233	3	700
Clothes-line fastening device	A. E. Schatz	136,768	Mar. 11, 1873	374	124	3	284
Clothes-line holder	W. Cooke	141,921	Aug. 19, 1873	477	157	4	191
Clothes-line pole	C. B. Brown	136,641	Mar. 11, 1873	271	91	3	276
Clothes-line reel	J. Brizee	138,785	May 13, 1873	294	90	3	531
Clothes-line reel	G. F. Corliss	144,387	Nov. 11, 1873	191	65	4	505
Clothes-line reel	C. Rosenthal	141,015	July 22, 1873	623	210	4	87
Clothes-line sliding support	M. Bubser	134,849	Jan. 14, 1873	329	105	3	46
Clothes-line support	J. E. Roache	142,278	Aug. 26, 1873	800	264	4	227
Clothes-mangle	S. Short	145,910	Dec. 23, 1873	790	259	4	685
Clothes-pin	H. Mellish	143,024	Sept. 23, 1873	626	213	4	325
Clothes-pin	V. D. Urso and B. Charles	141,740	Aug. 12, 1873	300	98	4	167
Clothes-pin	W. Wellington	135,501	Feb. 4, 1873	98	31	3	135
Clothes-pins, Machine for making	B. B. and A. J. Ockington	145,587	Dec. 16, 1873	500	164	4	650
Clothes-pins, Machinery for making	J. B. Smith	144,152	Oct. 28, 1873	708	236	4	466
Clothes-pounder	S. F. Hawley	143,901	Oct. 21, 1873	475	160	4	437
Clothes-pounder	S. Hinkel	138,024	Apr. 22, 1873	690	218	3	447
Clothes-pounder	D. W. Rawson	138,044	Apr. 22, 1873	713	225	3	449
Clothes-pounder	E. S. Saxton	141,082	July 22, 1873	682	229	4	92
Clothes-pressing machine	H. E. Smith	139,201	May 20, 1873	674	211	3	575
Clothes-reel	D. L. Huff	142,631	Sept. 9, 1873	279	92	4	276
Clothes-reel	J. McMahon	141,064	July 22, 1873	664	223	4	91
Clothes-washer	W. R. Brooks	139,494	June 3, 1873	46	14	3	612
Clothes-washer	H. D. Crooker	136,038	Feb. 18, 1873	597	196	3	200
Clothes-washer	G. J. Terrell	139,979	June 17, 1873	495	157	3	672
Clothes-wringer	T. O. Bogert	134,633	Jan. 7, 1873	125	40	3	17
Clothes-wringer	W. P. Brooks and J. D. Hartzell	140,344	July 1, 1873	9	3	4	8
Clothes-wringer	H. J. Burr	143,220	Sept. 30, 1873	788	272	4	355
Clothes-wringer	R. S. Cathcart	134,641	Jan. 7, 1873	132	42	3	17
Clothes-wringer	D. M. Cole	139,545	June 3, 1873	85	29	3	616
Clothes-wringer	E. A. Corbin and H. Albrecht	140,249	June 24, 1873	749	237	3	701
Clothes-wringer	G. E. Gault and A. W. Winall	134,658	Jan. 7, 1873	149	47	3	18
Clothes-wringer	C. E. Haynes	138,803	May 13, 1873	309	96	3	533
Clothes-wringer	T. E. McDonald	135,237	Jan. 28, 1873	701	{ 224 225 }	3	104
Clothes-wringer	T. E. McDonald	144,627	Nov. 18, 1873	400	134	4	533
Clothes-wringer	G. S. Prindle	135,585	Feb. 4, 1873	182	57	3	142
Clothes-wringer	C. Robinson	140,592	July 8, 1873	229	77	4	38
Clothes-wringer	J. Seaman	144,705	Nov. 18, 1873	465	157	4	539
Clothes-wringer	H. E. Smith	139,200	May 20, 1873	673	211	3	575
Clothes-wringer, Centrifugal	A. Rosamyer, jr.	142,045	Aug. 19, 1873	589	193	4	200
Clothes-wringer roller	E. P. H. Capron	141,424	Aug. 5, 1873	13	3	4	136
Clover-separator	C. L. Allen	136,805	Mar. 18, 1873	418	139	3	297
Clutch	W. Knight and N. W. Lewis	140,142	June 24, 1873	661	208	3	693
Clutch for machinery	W. B. Duckworth	138,139	Apr. 22, 1873	790	252	3	455
Clutch, Friction	S. B. Alger	137,335	Apr. 1, 187	55	16	3	361
Clutch, Friction	E. Allen	138,980	May 20, 187	468	147	3	559
Clutch, Friction	J. J. Grant	142,227	Aug. 26, 187	759	250	4	223
Clutch, Friction	J. J. Grant	142,564	Sept. 9, 187	226	74	4	272
Clutch mechanism, Friction	J. J. Coburn	138,075	Apr. 22, 1873	741	234	3	451
Coach and car truss	G. F. Challender	143,498	Oct. 7, 1873	85	29	4	387
Coach bodies, &c., Trestle for painting	W. M. Knapp	144,339	Nov. 4, 1873	138	46	4	489
Coach or carriage	J. Allgaier	139,753	June 10, 1873	297	92	3	648
Coach or carriage	J. Allgaier	140,666	July 8, 1873	229	98	4	43

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Coal and ore washing apparatus	M. Evrard	142, 221	Aug. 26, 1873	753	248	4	223
Coal and ore separator, Feeding device for	H. Bradford	143, 323	Sept. 30, 1873	877	300	4	362
Coal and rock cutting machine	H. F. Brown	142, 896	Sept. 16, 1873	510	174	4	306
Coal-barge, Unloading	W. A. Wright	138, 727	May 6, 1873	233	73	3	516
Coal, &c., Bit for boring	S. Hipkins, jr	134, 805	Jan. 14, 1873	291	94	3	43
Coal-boring machine	S. Hipkins, jr	134, 804	Jan. 14, 1873	287	93, 94	3	43
Coal-boring machine	D. Shoemaker	142, 950	Sept. 16, 1873	557	189	4	310
Coal-breaker	H. Bradford	143, 745	Oct. 21, 1873	344	115	4	426
Coal-breaker	R. A. Wilder	142, 426	Sept. 2, 1873	91	30	4	250
Coal, &c., breaking machine	R. A. Wilder	136, 887	Mar. 18, 1873	486	161	3	303
Coal-cutting machine	S. Firth	137, 669	Apr. 8, 1873	356	{ 110 111 }	3	397
Coal-cutting machine	J. Gillott and P. Copley	144, 529	Nov. 11, 1873	309	104	4	515
Coal-delivering sack	W. S. Shackleton	142, 741	Sept. 9, 1873	374	125	4	284
Coal-dust, small fuel, &c., Furnace for burning	J. Tissot	135, 298	Jan. 28, 1873	751	242	3	108
Coal-hod	J. H. Brown	141, 485	Aug. 5, 1873	66	21	4	140
Coal-hod	H. B. Safford	142, 734	Sept. 9, 1873	366	123	4	283
Coal, Machine for mining	G. Elbreg	134, 870	Jan. 14, 1873	347	{ 110 111 }	3	48
Coal-mining machinery	J. Alexander	135, 874	Feb. 18, 1873	463	149	3	190
Coal-mining machine	W. Case	139, 541	June 3, 1873	81	28	3	615
Coal-mining machine	C. L. Driesslein	136, 712	Mar. 11, 1873	328	108	3	281
Coal-mining machine	F. M. W. Price	142, 582	Sept. 9, 1873	240	79	4	273
Coal, ore, &c., Separator for	H. Bradford	143, 219	Sept. 30, 1873	785	{ 271 272 }	4	354
Coal-screen	S. W. Woodward	138, 355	Apr. 29, 1873	1, 012	318	3	481
Coal screen and chute	M. R. Roberts	140, 077	June 17, 1873	584	185	3	679
Coal-scuttle	G. Howland	135, 554	Feb. 4, 1873	149	47, 48	3	139
Coal-scuttle	A. S. Thompson	143, 311	Sept. 30, 1873	868	297	4	361
Coal-scuttle	J. J. White	143, 208	Sept. 23, 1873	772	266	4	337
Coal-separator	J. B. Wilford	143, 395	Sept. 30, 1873	945	319	4	367
Coating metal with copper	O. Gauduin, J. B. J. Mignon, and S. H. Rouart	141, 132	July 22, 1873	727	.....	4	95
Cock	A. S. Devendorf	140, 685	July 8, 1873	306	103	4	44
Cock	J. W. Faxon	143, 683	Oct. 14, 1873	265	87	4	410
Cock	H. S. Ross	142, 122	Aug. 26, 1873	673	221	4	216
Cock and check-valve combined, Stop	A. T. Waldron	138, 963	May 13, 1873	443	139	3	544
Cock and regulator for gas-burner, Stop	A. E. Delonest	135, 895	Feb. 18, 1873	480	155	3	191
Cock, Automatic lubricating water and gas	E. F. Brooks	144, 735	Nov. 18, 1873	489	166	4	541
Cock boxing, Stop	W. H. Graham	143, 978	Oct. 28, 1873	563	187	4	454
Cock, check-valve and blow-off, Combined stop	E. G. Cushing	138, 077	Apr. 22, 1873	742	235	3	451
Cock, Compression	E. Allt	140, 337	July 1, 1873	2	1	4	8
Cock, Cylinder	D. B. Dennison	136, 221	Feb. 25, 1873	768	248	3	225
Cock for controlling discharge through two pipes	J. and T. D. Richardson	142, 120	Aug. 26, 1873	671	221	4	216
Cock for drawing beer	J. Moffet	142, 860	Sept. 16, 1873	481	164	4	303
Cock for locomotive, Cylinder	C. H. Hopkins	136, 724	Mar. 11, 1873	338	112	3	281
Cock for outlet valve, Waste	S. J. Olsson	143, 995	Oct. 28, 1873	580	193	4	456
Cock for water and gas service pipe, Securing cover on box for stop	F. H. Laforge	135, 822	Feb. 11, 1873	406	131	3	171
Cock, Gage	H. J. Bailey	141, 416	Aug. 5, 1873	5	2	4	135
Cock, Gage	J. F. Bellemere and F. R. Fleer	141, 104	July 22, 1873	702	235	4	94
Cock, Gage	A. A. Murray	143, 923	Oct. 21, 1873	492	166	4	438
Cock, Gas	E. M. Morris	145, 442	Dec. 9, 1873	360	120	4	626
Cock, Racking	A. Roos	144, 565	Nov. 11, 1873	339	115	4	517
Cock, Regulating	C. E. Seal	142, 521	Sept. 2, 1873	178	58	4	256
Cock, Self-closing	M. S. Clark	141, 630	Aug. 12, 1873	210	66	4	160
Cock, Self-closing stop	J. Pigot	138, 580	May 6, 1873	100	32	3	506
Cock, Soda-fountain draft	W. P. Clark	138, 615	May 6, 1873	127	42	3	508
Cock, Soda-water and sirup	W. Gee	138, 143	Apr. 22, 1873	793	253	3	455
Cock, Stop	J. W. Birkett	142, 763	Sept. 16, 1873	403	136	4	297
Cock, Stop	W. S. Cooper	140, 248	June 24, 1873	748	236	3	701
Cock, Stop	G. W. Eddy	139, 559	June 3, 1873	100	34	3	617
Cock, Stop	C. W. Laurie	143, 167	Sept. 23, 1873	735	253	4	334
Cock, Stop	J. P. Mern	137, 144	Mar. 25, 1873	719	239	3	332
Cock, Stop	J. Regester and W. H. Bowen	142, 350	Sept. 2, 1873	25	10	4	244
Cock, Stop	L. C. Rodier and F. G. Bates	144, 700	Nov. 18, 1873	461	156	4	539
Cock, Stop	E. F. Spaulding	141, 471	Aug. 5, 1873	56	17	4	139
Cock, Valve	J. Walsh	141, 839	Aug. 12, 1873	391	128	4	174
Cock, Weighted gage	S. P. M. Tasker and W. H. Mc- Millan	137, 259	Mar. 25, 1873	826	272	3	340
Cock with safety-plug, Apparatus or	P. A. Chambeaux	146, 045	Dec. 30, 1873	930	300	4	707
Cocks, Machine for dressing metal	H. Essex	144, 524	Nov. 11, 1873	303	102	4	514
Cocoa-nut for use in pies, cakes, &c.	N. A. Classon	145, 722	Dec. 23, 1873	627	.....	4	672
Cocoa-nut, Machine for granulating	T. and G. M. Mills	139, 804	June 10, 1873	343	106	3	652
Coffee-mill	S. C. Jantzen	139, 960	June 17, 1873	481	151	3	671
Coffee-mill	L. Schultz	139, 824	June 10, 1873	361	111	3	653
Coffee-package	H. C. Lockwood	142, 248	Aug. 26, 1873	777	256	4	225
Coffee-pot	W. S. Blaisdell and E. Estabrook	142, 195	Aug. 26, 1873	733	241	4	221
Coffee-pot	H. J. Childs	134, 514	Jan. 7, 1873	12	4	3	8
Coffee-pot	H. J. Childs	134, 515	Jan. 7, 1873	12	5	3	8
Coffee-pot	H. J. Childs	136, 703	Mar. 11, 1873	320	106	3	280
Coffee-pot	B. Grigsby and T. C. Braselton	135, 544	Feb. 4, 1873	141	45	3	138
Coffee-pot	E. H. Huch	134, 603	Jan. 7, 1873	99	32	3	15
Coffee-pot	M. J. Stubbings	143, 102	Sept. 23, 1873	689	237	4	330
Coffee-pot	J. E. Weber and P. Knutson	144, 936	Nov. 25, 1873	667	226	4	566
Coffee-roaster	G. W. Dodson	139, 377	May 27, 1873	834	267	3	596
Coffee-roaster	J. Hart	137, 839	Apr. 15, 1873	519	162	3	423
Coffee-roaster	T. Heermans	141, 789	Aug. 12, 1873	349	115	4	171
Coffee-roaster	W. J. Lane	145, 576	Dec. 16, 1873	491	161	4	649
Coffee-roaster	H. C. Lockwood	145, 880	Dec. 23, 1873	763	249	4	683
Coffee-roaster	W. H. Welch	139, 984	June 17, 1873	499	158	3	672
Coffee-roaster	A. W. Weyburn	136, 292	Feb. 25, 1873	834	269	3	230
Coffee-roaster, Cover for	L. J. Dyke	136, 980	Mar. 18, 1873	563	187	3	309
Coffee-steepener	J. D. Adney	139, 645	June 10, 1873	191	63	3	640
Coffee substitute	E. Dugdale	143, 889	Oct. 21, 1873	466		4	436

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Coffee substitute.....	E. Dugdale.....	143,890	Oct. 21, 1873	467		4	436
Coffee, Treating damaged.....	F. Evans.....	134,791	Jan. 14, 1873	278		3	42
Coffee, Treating damaged.....	F. Evans.....	134,792	Jan. 14, 1873	278	.....	3	42
Coffee-urn.....	C. Hitchcock.....	145,653	Dec. 16, 1873	554	183	4	654
Coffin.....	P. E. Ober.....	135,006	Jan. 21, 1873	481	154	3	74
Coffin.....	F. Tighe.....	143,204	Sept. 23, 1873	770	265	4	337
Coffin-fastening.....	W. S. Crane.....	143,748	Oct. 21, 1873	346	115	4	426
Coffin, Glass.....	J. N. and T. Wallis.....	139,095	May 20, 1873	573	180	3	567
Coffin-handle.....	J. S. Ray.....	137,958	Apr. 15, 1873	615	194	3	431
Coffin-handle.....	H. Rogers, jr.....	138,696	May 6, 1873	203	64	3	514
Coffin-handle.....	C. Strong.....	138,768	May 13, 1873	280	87	3	530
Coffin-plate.....	G. Brabrook.....	140,457	July 1, 1873	95	32	4	16
Coffin-plate.....	G. B. Ransom.....	135,155	Jan. 21, 1873	603	196	3	84
Coffin, Sheet-metal.....	J. D. Farrington, jr., and T. P. Austin.....	144,604	Nov. 18, 1873	379	128	4	532
Coffin-sides, Apparatus for bending.....	J. P. Albin.....	145,827	Dec. 23, 1873	714	235	4	679
Coil-holder for wire, &c.....	I. E. Palmer.....	143,376	Sept. 30, 1873	930	315	4	366
Coil-springs, Manufacture of.....	W. H. Ward.....	136,473	Mar. 4, 1873	105	35	3	254
Coin-counting implement.....	A. Whittemore.....	134,962	Jan. 14, 1873	426	136	3	54
Coke from lignites, Process for making.....	H. Engelmann.....	136,592	Mar. 11, 1873	230	77	3	273
Coking-furnace.....	H. Engelmann.....	141,778	Aug. 12, 1873	335	{ 110 111 }	4	170
Coking-furnace.....	H. Englemann.....	141,779	Aug. 12, 1873	338	111	4	171
Collar.....	J. T. Bruen.....	134,638	Jan. 7, 1873	130	42	3	17
Collar.....	A. Flatley.....	137,353	Apr. 1, 1873	70	22	3	362
Collar.....	G. F. Rice.....	137,096	Mar. 25, 1873	678	225	3	329
Collar and cravat, Combined.....	F. D. James.....	139,959	June 17, 1873	481	151	3	671
Collar and cuff.....	E. P. Furlong.....	144,611	Nov. 18, 1873	387	130	4	533
Collar and cuff drier.....	D. W. De Forrest.....	144,838	Nov. 25, 1873	588	201	4	559
Collar and tag cutting-machine.....	S. S. Gray.....	145,941	Dec. 16, 1873	840	273	4	700
Collar cap, Horse.....	R. J. Algeo.....	136,804	Mar. 18, 1873	418	139	3	297
Collar fastener, Shirt.....	G. W. Brientnall.....	141,484	Aug. 5, 1873	65	21	4	140
Collar fastening, Horse.....	E. H. Sprague.....	137,105	Mar. 25, 1873	687	228	3	330
Collar fastening, Shirt.....	G. Strasger.....	145,974	Dec. 30, 1873	870	282	4	702
Collar gage, Horse.....	J. M. Everitt.....	139,949	June 17, 1873	474	149	3	670
Collar, Harness breast.....	H. B. Morrison.....	138,039	Apr. 22, 1873	708	224	3	448
Collar, Horse.....	E. Batwell.....	137,879	Apr. 15, 1873	549	171	3	426
Collar, Horse.....	W. Guilfoyle.....	137,608	Apr. 8, 1873	304	94	3	393
Collar, Horse.....	O. Lafreniere.....	140,714	July 8, 1873	331	112	4	46
Collar, Horse.....	J. N. Schmitz.....	139,822	June 10, 1873	359	111	3	653
Collar, &c., Lining for horse.....	I. Lindsley and J. Mackintosh.....	143,987	Oct. 28, 1873	570	190	4	455
Collar lining, Horse.....	D. Curtis.....	138,383	Apr. 29, 1873	1,034	326	3	483
Collar-pad.....	P. H. Beaver.....	137,049	Mar. 25, 1873	636	210	3	326
Collar-pad, Metallic sweat and.....	J. M. C. Bennett.....	138,990	May 20, 1873	478	151	3	560
Collar, Shirt.....	O. P. Dorman.....	137,537	Apr. 8, 1873	242	74	3	388
Collodion compound.....	J. A. McClelland.....	143,772	Oct. 21, 1873	365	121	4	428
Collodion, Preparing soluble cotton for the manufacture of.....	H. T. Anthony.....	143,865	Oct. 21, 1873	447	.....	4	435
Coloring-matter from vegetable substances, Producing.....	L. M. F. Bretonniere.....	142,892	Sept. 16, 1873	506	.....	4	305
Colors, Preparing and packing water.....	E. L. Mollineux.....	138,915	May 13, 1873	404	127	3	541
Colter.....	R. Emerson.....	136,647	Mar. 11, 1873	276	92	3	276
Colter-clasp.....	C. H. Thomas.....	141,675	Aug. 12, 1873	248	79	4	163
Column, Fire-proof.....	T. Hyatt.....	145,180	Dec. 2, 1873	133	43	4	596
Column, Metallic.....	S. Brandeis.....	142,201	Aug. 26, 1873	738	243	4	222
Column, Metallic.....	J. L. Piper.....	138,817	May 13, 1873	322	99	3	534
Column, Metallic.....	J. L. Piper.....	141,665	Aug. 12, 1873	240	76	4	162
Column, wrought-iron.....	L. Herman.....	134,987	Jan. 21, 1873	460	147	3	72
Comb: See Band-comb. Curry-comb. Toilet-comb.							
Comb-frame.....	W. Rasey.....	143,383	Sept. 30, 1873	935	317	4	366
Comb-holder.....	E. E. Wheeler.....	144,242	Nov. 4, 1873	65	20	4	483
Combining-machine.....	I. B. and H. Smith, and C. Bradley.....	137,326	Apr. 1, 1873	47	14	3	361
Combination-lock.....	H. Clarke.....	135,523	Feb. 4, 1873	117	37	3	137
Combination-lock.....	P. W. Hall.....	140,500	July 1, 1873	133	46	4	19
Combination-lock.....	A. D. Hoffman.....	141,876	Aug. 19, 1873	441	144	4	188
Combination-lock.....	W. C. McGill.....	136,606	Mar. 11, 1873	239	81	3	274
Comminuting various substances, Apparatus for.....	G. B. Canning.....	136,700	Mar. 11, 1873	317	105	3	280
Commode.....	J. D. Averell.....	143,488	Oct. 7, 1873	76	26	4	387
Compass, Beam.....	M. Toulmin.....	142,823	Sept. 16, 1873	451	152	4	301
Compass, Solar.....	H. O. Cook.....	141,766	Aug. 12, 1873	325	106	4	169
Compound engine.....	W. Wright.....	144,817	Nov. 18, 1873	557	189	4	546
Compound steam-engine.....	W. W. Crane.....	139,549	June 3, 1873	89	31	3	616
Compound steam-engine.....	C. E. Emery.....	139,052	May 20, 1873	528	167	3	564
Compound steam-engine.....	L. Huntoon.....	135,223	Jan. 28, 1873	684	221	3	103
Composing-stick.....	L. Buschmann.....	143,875	Oct. 21, 1873	455	152	4	435
Compositor's stand.....	F. Vallee.....	137,639	Apr. 8, 1873	329	101	3	395
Condenser.....	H. A. Towne.....	142,060	Aug. 19, 1873	601	198	4	201
Condenser and feeder, Steam-boiler.....	F. A. Fischer.....	139,136	May 20, 1873	612	{ 191 192 }	3	570
Condenser and feed-water apparatus, Combined.....	J. S. Gibson.....	144,331	Nov. 4, 1873	131	44	4	489
Condenser and refiner for spirituous liquors.....	W. Neil.....	138,517	May 6, 1873	46	16	3	501
Condenser for manufacture of illuminating gas.....	P. T. Burtis.....	141,543	Aug. 5, 1873	117	36	4	144
Condenser for marine steam-engines.....	J. Houpt.....	144,203	Nov. 4, 1873	28	8, 9	4	480
Condenser for steam-pumps.....	D. Stoddart.....	145,538	Dec. 16, 1873	462	151	4	646
Condenser, Marine.....	B. T. Babbitt.....	142,665	Sept. 9, 1873	310	103	4	279
Condenser, Steam.....	J. L. Alberger.....	139,102	May 20, 1873	578	181	3	568
Condenser, Steam.....	J. L. Alberger.....	140,232	June 24, 1873	735	232	3	700
Condenser, Steam.....	E. Korting.....	134,900	Jan. 14, 1873	374	118	3	50
Condenser, Steam.....	E. Korting.....	141,361	July 29, 1873	962	313	4	122
Condenser, Steam-engine.....	S. A. Goodwin.....	135,906	Feb. 18, 1873	488	158	3	192
Condenser, Steam-engine.....	J. Houpt.....	136,917	Mar. 18, 1873	511	169	3	305
Condenser, Steam-engine.....	G. Wales.....	135,180	Jan. 21, 1873	623	203	3	84

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Condenser, Steam-engine jet	J. Haupt	136, 918	Mar. 18, 1873	513	169	3	304
Condenser-tube fastening	S. Archbold	143, 314	Sept. 30, 1873	869	298	4	362
Condensers, Device for cleaning surface	H. C. Bucknam	142, 766	Sept. 16, 1873	406	137	4	297
Confectionery, Apparatus for making	W. H. Seidenstricker	138, 587	May 6, 1873	106	34	3	506
Connecting-rod	T. T. Prosser	145, 752	Dec. 23, 1873	652	214	4	674
Connecting-rod	W. L. Switzer	145, 917	Dec. 23, 1873	797	261	4	685
Connecting-rod	B. F. Wilson	141, 191	July 22, 1873	787	258	4	100
Cooker, Steam	J. Bentz	145, 981	Dec. 30, 1873	875	284	4	703
Cooking-apparatus	C. Hood	137, 843	Apr. 15, 1873	521	162 163	3	424
Cooking-apparatus	M. J. De Leon	140, 253	June 24, 1873	752	238	3	701
Cooking-apparatus, Portable	G. Yinger	135, 682	Feb. 11, 1873	282	88	3	162
Cooking-apparatus, Steam	J. Lundgren	143, 171	Sept. 23, 1873	739	255	4	335
Cooking-utensil	J. Mansfield	135, 483	Feb. 4, 1873	84	26	3	134
Cooking-utensil	E. J. Sprague	139, 433	May 27, 1873	891	287	3	601
Cooking-vessel	L. P. and J. S. Bodkin	138, 846	May 13, 1873	349	108	3	536
Cooking-vessel	W. Y. Thomson	136, 467	Mar. 4, 1873	99	33	3	353
Cooler:							
<i>See</i> Beer-cooler.							
Corpse-cooler.							
Liquid-cooler.							
Liquor-cooler.							
Milk-cooler.							
Soda-water cooler.							
Water-cooler.							
Water and beer cooler.							
Wine-cooler.							
Cooling air and making ice, Apparatus for	T. D. Kingan	145, 659	Dec. 16, 1873	560	184	4	655
Cooling and purifying air in breweries, packing- houses, &c.	L. Schulze	142, 046	Aug. 19, 1873	590	193 194	4	201
Cooling rooms and buildings, Apparatus for	T. D. Kingan	138, 411	Apr. 29, 1873	1,059	333	3	485
Cooling rooms, Apparatus for	A. M. Lesley	139, 470	June 3, 1873	23	7	3	611
Cooling storage-rooms, Apparatus for	J. Ring	140, 792	July 15, 1873	402	137	4	60
Coop, Chicken	W. J. H. Kappe	140, 277	June 24, 1873	774	245	3	703
Coop, Folding	E. P. Lawrence	145, 302	Dec. 9, 1873	240	81	4	617
Cooper's croze and howel	W. R. Davis	142, 995	Sept. 23, 1873	602	204	4	324
Copper and other ores, Process for the reduction of	H. Stull	146, 031	Dec. 30, 1873	916	.....	4	706
Copper balls, Apparatus for hardening	A. Weldon	141, 247	July 29, 1873	854	278	4	113
Copper, &c., vessel, Metal-lined	J. Matthews	137, 226	Mar. 25, 1873	797	.....	3	338
Cop-winding machine	W. Chadwick and S. Lownds	143, 497	Oct. 7, 1873	84	29	4	387
Copy-holder	W. R. Carter	143, 616	Oct. 14, 1873	203	68	4	406
Copy-holder	S. French and R. D. Chase	138, 877	May 13, 1873	376	117	3	538
Copying and folding press	S. W. Odell	145, 306	Dec. 9, 1873	244	82	4	617
Copying-press table	B. Brower	141, 422	Aug. 5, 1873	12	3	4	136
Cord-covering machine	J. E. Gillespie and T. Kohn	137, 360	Apr. 1, 1873	75	24	3	363
Cord, Machine for making	E. Otis	145, 747	Dec. 23, 1873	649	213	4	674
Core-bar for castings	D. Gallagher	143, 005	Sept. 23, 1873	610	207	4	324
Core-barrel for castings	J. B. Aston	142, 662	Sept. 9, 1873	307	102	4	279
Core-barrel for castings	W. Smith	142, 746	Sept. 9, 1873	378	127	4	284
Core for casting metals	O. D. Hunter	142, 790	Sept. 16, 1873	426	.....	4	299
Core, Sectional	W. A. Butler	138, 853	May 13, 1873	355	110	3	536
Cores, Device for forming	H. Parker	145, 748	Dec. 23, 1873	650	213	4	674
Cork, Bottle	I. B. Sampson	138, 820	May 13, 1873	324	100	3	534
Cork-cutting machine	T. S. Disston	134, 982	Jan. 21, 1873	455	146	3	72
Cork-extractor	C. F. Hunt	140, 706	July 8, 1873	325	110	4	46
Cork or stopper holder	G. H. Plummer	145, 235	Dec. 2, 1873	177	61	4	599
Corn-coverer	J. A. Moore	144, 918	Nov. 25, 1873	653	221	4	565
Corn-coverer	J. Tweedy	135, 301	Jan. 28, 1873	753	243	3	108
Corn-crib	J. M. Hughes and A. J. Mapes	138, 332	Apr. 29, 1873	994	313	3	479
Corn-dropper	R. M. and W. H. Bowman	145, 552	Dec. 16, 1873	474	155	4	647
Corn for grinding, Process of preparing	W. Standing	139, 743	June 10, 1873	287	.....	3	648
Corn-husker	J. M. Carlisle	134, 590	Jan. 7, 1873	86	27	3	14
Corn-husker	G. W. Carr	143, 667	Oct. 14, 1873	245	82	4	409
Corn-husker	C. A. Lang	139, 586	June 3, 1873	123	41	3	619
Corn-husker	P. Philip	135, 840	Feb. 11, 1873	419	136	3	172
Corn-husker	P. Philip	135, 841	Feb. 11, 1873	419	136	3	172
Corn-husker	J. Ure	143, 797	Oct. 21, 1873	386	128	4	430
Corn-husker, Hand	H. L. Hall	136, 157	Feb. 25, 1873	721	233	3	221
Corn-husking implement	O. J. Warren	136, 194	Feb. 25, 1873	750	242	3	224
Corn-husking machine	L. A. Aspinwall	144, 590	Nov. 18, 1873	369	125	4	531
Corn-husking thimble	G. W. Gash and C. L. Owens	137, 771	Apr. 15, 1873	460	144	3	419
Corn-knife	G. Stevenson	138, 447	Apr. 29, 1873	1,094	345	3	487
Corn-meal for shipment, Preparing	L. S. Chichester	136, 306	Feb. 25, 1873	844	.....	3	231
Corn-sheller	A. Adams	135, 306	Jan. 28, 1873	756	244	3	108
Corn-sheller	F. E. Brown and J. R. Shangle	138, 125	Apr. 22, 1873	778	248	3	454
Corn-sheller	F. Hollen and A. C. Holland	137, 842	Apr. 15, 1873	521	162	3	423
Corn-sheller	E. L. Hutchinson	141, 559	Aug. 5, 1873	130	41	4	146
Corn-sheller	J. B. Johnson	141, 795	Aug. 12, 1873	355	117	4	172
Corn-sheller	J. Marshall	145, 356	Dec. 9, 1873	287	96	4	621
Corn-sheller	R. M. McGrath	137, 942	Apr. 15, 1873	602	189	3	430
Corn-sheller	J. Rankin	135, 362	Jan. 28, 1873	810	261 262	3	113
Corn-sheller case	A. Borneman	135, 029	Jan. 21, 1873	500	161	3	75
Corn-sheller, Cob-carrier for	H. H. Eby	134, 790	Jan. 14, 1873	277	90	3	42
Corn-sheller, Feeding elevator for	P. Kaufman	141, 717	Aug. 12, 1873	281	92	4	166
Corn-sheller, Hand	J. M. Hawley	135, 709	Feb. 11, 1873	304	96	3	164
Corn-shocker	G. E. Johnson	145, 423	Dec. 9, 1873	346	116	4	625
Corn-stalk knife	J. M. Brick	138, 069	Apr. 22, 1873	737	233	3	451
Cornice and gutter, Metallic	J. B. Cornell	144, 259	Nov. 4, 1873	77	25	4	484
Cornice, Stucco	A. Derrom	139, 049	May 20, 1873	526	166	3	564
Corpse-cooler	S. H. Crump	141, 331	July 29, 1873	927	302	4	119
Corpse-cooler	E. S. Earley	135, 210	Jan. 28, 1873	672	217	3	102
Corpse-cooler	J. Hoffman	142, 393	Sept. 2, 1873	65	22	4	247
Corpse-cooler	F. N. Troll	142, 533	Sept. 2, 1873	189	61	4	257

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Corpse-preserver	H. Kersten	142, 919	Sept. 16, 1873	528	181	4	307
Corpse-preserver	C. O. Peck	145, 307	Dec. 9, 1873	245	82	4	617
Corpse-preserver	P. Taltavull	138, 449	Apr. 29, 1873	1, 097	346	3	488
Corpse-preserving composition	J. M. Gallagher	144, 085	Oct. 28, 1873	657	.....	4	462
Corrugating and beading sheet-metal pipes, Machine for.	J. Sargent	142, 945	Sept. 16, 1873	553	187	4	309
Corrugating sheet-iron, Machine for	A. and J. Reese	136, 267	Feb. 25, 1873	813	262	3	229
Corrugating sheet-metal, Machine for	F. Roys	139, 480	June 3, 1873	33	11	3	611
Corset	M. Cohn	137, 893	Apr. 15, 1873	561	176	3	427
Corset	S. Dixon	135, 097	Jan. 21, 1873	553	180	3	80
Corset	T. S. Gilbert	141, 134	July 22, 1873	728	{ 241 } 242	4	96
Corset	T. F. Hamilton	136, 320	Feb. 25, 1873	857	276	3	232
Corset	J. W. Lane	134, 902	Jan. 14, 1873	376	119	3	50
Corset	L. H. and A. F. Loomer and L. M. Smith.	145, 665	Dec. 16, 1873	566	186	4	655
Corset	M. Russell	137, 724	Apr. 8, 1873	408	125	3	402
Corset	J. Waterman	143, 479	Oct. 7, 1873	67	23	4	386
Corset	A. M. Weber	137, 985	Apr. 15, 1873	639	201	3	433
Corset-clasp	J. Burke	143, 403	Oct. 7, 1873	5	2	4	381
Corset-clasp	P. Lippmann	143, 359	Sept. 30, 1873	916	311	4	365
Corset-clasp	J. P. McLean	144, 689	Nov. 18, 1873	452	153	4	538
Corset-clasp	J. B. Roby	142, 279	Aug. 26, 1873	801	265	4	227
Corset-fastening	G. O. Schnell	139, 424	May 27, 1873	885	285	3	600
Corset-spring	G. Schneller	140, 733	July 8, 1873	345	117	4	48
Corset-steel	C. S. Chaffee	135, 079	Jan. 21, 1873	541	176	3	79
Corset, Woven	J. Ottenheimer	144, 921	Nov. 25, 1873	655	222	4	565
Cot, Spring	T. J. Griffin	137, 675	Apr. 8, 1873	362	112	3	398
Cotton and hay press	E. S. Collins	145, 629	Dec. 16, 1873	535	{ 175 } 176	4	653
Cotton and hay press	D. Reynolds	143, 641	Oct. 14, 1873	224	75	4	407
Cotton-bales, Band or hoop-tie for	E. J. Beard	140, 873	July 15, 1873	470	159	4	66
Cotton, Borer for sampling	E. A. Clark	141, 998	Aug. 19, 1873	540	178	4	196
Cotton-chopper	C. Bailey and G. K. Bagby	138, 363	Apr. 29, 1873	1, 018	320	3	481
Cotton-chopper	J. Coston	145, 849	Dec. 23, 1873	734	240	4	681
Cotton-chopper	J. M. Garrett	146, 061	Dec. 30, 1873	945	304	4	708
Cotton-chopper	W. Price	137, 715	Apr. 8, 1873	400	123	3	401
Cotton-chopper	W. C. Tilton	138, 596	May 6, 1873	112	37	3	507
Cotton-chopper and cultivator	M. L. Nearn	144, 281	Nov. 4, 1873	93	31	4	485
Cotton-chopper and cultivator combined	A. F. Roberts	143, 997	Oct. 28, 1873	582	193	4	456
Cotton-chopper and cultivator combined	J. B. Underwood	140, 746	July 8, 1873	360	122	4	49
Cotton-cleaner	J. Ralston	135, 586	Feb. 4, 1873	183	57	3	142
Cotton-gin	N. W. Gaddy	144, 668	Nov. 18, 1873	432	146	4	536
Cotton-gin	B. D. Gullett	140, 365	July 1, 1873	25	9	4	10
Cotton-gin	B. Hempstead	143, 074	Sept. 23, 1873	667	229	4	329
Cotton-gin	O. Murray	135, 485	Feb. 4, 1873	85	27	3	134
Cotton-gin	M. E. Pratt	140, 791	July 15, 1873	401	136	4	60
Cotton-gin	P. C. Sawyer	139, 820	June 10, 1873	357	110	3	653
Cotton-gin knife-roller	T. H. Rushton and W. Dobson	140, 218	June 24, 1873	725	228	3	699
Cotton-gin saw, Teeth for	T. B. Oglesby	138, 575	May 6, 1873	97	31	3	505
Cotton, hay, &c., Compressing-apparatus for	F. Weldon	137, 160	Mar. 25, 1873	732	{ 243 } 244	3	333
Cotton-laps, Machine for making	T. C. Craven	135, 528	Feb. 4, 1873	122	38, 39	3	137
Cotton-lint room, Fire-proof	R. R. Warren	142, 065	Aug. 19, 1873	605	199	4	201
Cotton-lint room, Revolving	W. T. Crenshaw	138, 865	May 13, 1873	364	113	3	537
Cotton-opener	R. Kitson	144, 394	Nov. 11, 1873	196	67	4	506
Cotton-opener, &c., Feed-mechanism for	W. Noton	136, 173	Feb. 25, 1873	733	236	3	222
Cotton-openers, &c., Feed-regulator for	D. Harding	142, 101	Aug. 26, 1873	654	215	4	215
Cotton-openers, Feed-regulator for	R. Kitson	145, 300	Dec. 9, 1873	239	80	4	617
Cotton or woolen can	H. W. Shepard	135, 853	Feb. 11, 1873	429	139	3	173
Cotton or woolen can	H. W. Shepard	135, 854	Feb. 11, 1873	430	140	3	173
Cotton-press	J. M. Brooks, jr.	136, 697	Mar. 11, 1873	315	104	3	279
Cotton-press	P. K. Dederick	134, 592	Jan. 7, 1873	88	27	3	14
Cotton-press	J. P. Derden	136, 422	Mar. 4, 1873	59	21	3	250
Cotton-press	C. C. Howard	136, 725	Mar. 11, 1873	339	112	3	281
Cotton-press	T. R. Jackson	143, 349	Sept. 30, 1873	906	308	4	364
Cotton-press	T. D. Leoneard	144, 775	Nov. 18, 1873	523	178	4	544
Cotton-press	R. Lewis	136, 841	Mar. 18, 1873	448	148	3	300
Cotton-press	B. G. Martin	136, 846	Mar. 18, 1873	453	150	3	300
Cotton-press	W. W. Patrick	139, 970	June 17, 1873	489	154	3	671
Cotton-press	R. Powers	135, 486	Feb. 4, 1873	87	27	3	134
Cotton-press	J. P. Pridgeon	140, 841	July 15, 1873	443	151	4	64
Cotton-press	W. H. Reynolds	138, 583	May 6, 1873	103	33	3	506
Cotton-press	M. M. Scherer	142, 517	Sept. 2, 1873	175	57	4	256
Cotton-press	T. S. Smith	141, 393	July 29, 1873	991	322	4	124
Cotton-press	P. and R. A. Williams	142, 882	Sept. 16, 1873	498	170	4	305
Cotton-press	D. H. Wooldridge	139, 845	June 10, 1873	376	117	3	655
Cotton-scraper	W. Jarrel	141, 355	July 29, 1873	957	{ 311 } 312	4	121
Cotton-stalk knocker	M. M. Carruth	137, 825	Apr. 15, 1873	504	157	3	422
Cotton-waste, Cleaning	G. Sagar	139, 921	June 17, 1873	455	.....	3	668
Couch, Accouchement	E. L. Moore	136, 663	Mar. 11, 1873	288	96	3	277
Counter-shears	N. Stow	136, 558	Mar. 4, 1873	186	60	3	260
Counters, Machine for skiving	C. Keniston	134, 551	Jan. 7, 1873	45	14	3	11
Counting-register	R. P. Hinds	135, 336	Jan. 28, 1873	788	255	3	111
Counting-register	G. H. Van Vleck	137, 262	Mar. 25, 1873	830	273	3	341
Coupling:							
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Plow-coupling.							
Shaft-coupling.							
Spring-coupling.							
Steam-heater coupling.							
Thill-coupling.							
Union-coupling.							
Universal-coupling.							
Universal-joint coupling.							
Vehicle-coupling.							
Vehicle-spring coupling.							
Wagon-coupling.							
Whiffletree-coupling.							
Coverlet	C. K. Pevey	140, 948	July 15, 1873	547	183	4	72
Cowl:							
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Cows from kicking, Device for preventing	H. J. Sadler and S. H. Spencer	140, 594	July 8, 1873	231	77	4	38
Cows' tails, Fetter for	C. F. Tolles	143, 943	Oct. 21, 1873	508	171	4	440
Cracker-machine	J. Fox	143, 686	Oct. 14, 1873	267	88	4	410
Cracker-machine	G. J. Kingsbury	143, 579	Oct. 14, 1873	171	58	4	403
Cracker-machine	L. A. Rockwell	139, 920	June 17, 1873	453	{ 141 142 }	3	668
Cradle	F. Chichester	141, 033	July 22, 1873	637	214	4	88
Cradle	W. T. Doremus	138, 320	Apr. 29, 1873	986	310	3	479
Cradle	C. A. Fenner	144, 391	Nov. 11, 1873	193	66	4	506
Cradle	M. Griffin	134, 661	Jan. 7, 1873	155	51	3	19
Cradle	L. Heywood	135, 117	Jan. 21, 1873	569	185	3	81
Cradle	D. Souder	137, 868	Apr. 15, 1873	541	168	3	425
Cradle and rocking-chair, Combined	E. Hambur	135, 425	Feb. 4, 1873	30	9	3	130
Cradle, Automatic	I. S. Goldman	138, 144	Apr. 22, 1873	794	253	3	455
Cradle, Automatic	W. V. Van Dervort and R. B. Walker	139, 838	June 10, 1873	372	115	3	654
Cradle or crib, Folding	M. McNamara	135, 138	Jan. 21, 1873	590	192	3	82
Cradle, Portable	W. S. Harris	146, 069	Dec. 30, 1873	950	307	4	709
Cradle, Self-rocking	C. Holtz	139, 247	May 27, 1873	729	230	3	587
Cradle, Spring	F. Chichester	141, 032	July 22, 1873	637	214	4	88
Cradle to rocking-chair, Coupling for connecting	J. Reeves	142, 583	Sept. 9, 1873	241	79	4	273
Cranberry-picker	J. Weston	145, 979	Dec. 30, 1873	873	283	4	702
Crane	R. Briggs	140, 882	July 15, 1873	478	162	4	66
Crane	F. Farrel	138, 876	May 13, 1873	375	117	3	538
Crane	J. L. Pennock	145, 234	Dec. 2, 1873	176	61	4	599
Crane, Steam	D. Tillson	137, 737	Apr. 8, 1873	419	129	3	402
Crank-heating apparatus	J. Miller	137, 944	Apr. 15, 1873	603	190	3	431
Crank, Movement	H. C. Bradford	135, 073	Jan. 21, 1873	537	174	3	78
Crank-shaft, Eccentric	J. F. Haskins	137, 441	Apr. 1, 1873	145	47	3	369
Crayon-holder	A. F. Howard	137, 844	Apr. 15, 1873	522	163	3	424
Crib	W. B. Carpenter	141, 918	Aug. 19, 1873	475	156	4	191
Crib, Child's	J. D. Lewis	145, 218	Dec. 2, 1873	161	56	4	598
Crib, Folding	C. Kilburn	134, 895	Jan. 14, 1873	370	117	3	50
Crib or hammock, Swinging	D. O'Grady	137, 235	Mar. 25, 1873	804	265	3	339
Crimping and fluting-machine	R. Werner	134, 621	Jan. 7, 1873	112	37	3	16
Crimping and fluting-machine	R. Werner	140, 326	June 24, 1873	821	261	3	707
Crimping-clamp	P. A. Schoellhorn	141, 956	Aug. 19, 1873	504	166	4	193
Crimping-machine	L. P. Lum	145, 303	Dec. 9, 1873	241	81	4	617
Croquet-mallet	E. A. Ross	136, 388	Mar. 4, 1873	32	12	3	248
Croquet wicket-driver	E. A. Barker	142, 072	Aug. 26, 1873	629	207	4	213
Crow and tamping-bar	A. Wright and A. F. Tew	138, 599	May 6, 1873	115	38	3	507
Croze, Coopers'	J. Bailey	139, 852	June 17, 1873	390	122	3	663
Crusher:							
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Clod-crusher.							
Culinary-crusher.							
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Rock and ore crusher.							
Stone-crusher.							
Crushing-mill	J. W. Smith	137, 035	Mar. 18, 1873	612	203	3	313
Cuff	E. E. Mack	145, 957	Dec. 30, 1873	854	278	4	701
Cuff	I. M. Post	136, 760	Mar. 11, 1873	368	122	3	284
Cuff-holder	G. W. James	144, 101	Oct. 28, 1873	670	221	4	463
Cuff, Reversible	L. H. Foy	137, 907	Apr. 15, 1873	576	181	3	428
Culinary apparatus	R. H. Cazier	141, 114	July 22, 1873	710	237	4	94
Culinary boiler	J. H. Corey	143, 673	Oct. 14, 1873	249	84	4	409
Culinary boiler	S. S. Fitch	137, 604	Apr. 8, 1873	301	93	3	393
Culinary boiler	R. B. Lewis	137, 140	Mar. 25, 1873	716	238	3	332
Culinary crusher and press	G. B. Fowler	136, 498	Mar. 4, 1873	127	41	3	256
Culinary utensil	H. G. Dunkelberger	144, 518	Nov. 11, 1873	298	100	4	514
Culinary vessel	W. A. Barlow	145, 550	Dec. 16, 1873	473	154	4	647
Cultivating implement, Garden	D. Mack	144, 912	Nov. 25, 1873	647	220	4	565
Cultivating-plow	W. Bagnall	144, 247	Nov. 4, 1873	69	22	4	483
Cultivator	D. C. Baker	138, 838	May 13, 1873	342	{ 105 106 }	3	535
Cultivator	L. Baldwin	137, 649	Apr. 8, 1873	336	104	3	396
Cultivator	J. Behel	135, 964	Feb. 18, 1873	533	176	3	195
Cultivator	C. Billups	135, 070	Jan. 21, 1873	535	174	3	78
Cultivator	B. C. Bradley	135, 401	Feb. 4, 1873	6	2	3	128
Cultivator	B. F. Brate	136, 409	Mar. 4, 1873	49	17	3	249
Cultivator	E. Briggs	141, 199	July 29, 1873	802	262	4	109
Cultivator	S. S. Bushnell	134, 728	Jan. 14, 1873	226	72	3	39
Cultivator	I. N. Cauthorn	134, 732	Jan. 14, 1873	228	73	3	39
Cultivator	R. S. Cavett	144, 740	Nov. 18, 1873	402	167	4	541
Cultivator	J. Caylor	140, 885	July 15, 1873	482	163	4	67

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Cultivator	A. Cooper	145, 848	Dec. 23, 1873	734	240	4	681
Cultivator	S. Crutcher	144, 321	Nov. 4, 1873	124	41	4	488
Cultivator	W. P. Dale	136, 708	Mar. 11, 1873	324	107	3	280
Cultivator	J. W. Doud	140, 484	July 1, 1873	119	41	4	18
Cultivator	D. B. Eberly	145, 636	Dec. 16, 1873	541	{ 177 178 }	4	653
Cultivator	D. Edwards	136, 047	Feb. 18, 1873	604	199	3	201
Cultivator	R. Ellwood and R. L. Pitcher	140, 353	July 1, 1873	17	5, 6	4	9
Cultivator	R. A. Fish	141, 707	Aug. 12, 1873	273	89	4	165
Cultivator	J. H. Frank	143, 338	Sept. 30, 1873	890	304	4	363
Cultivator	L. M. Ganong	136, 500	Mar. 4, 1873	128	41	3	256
Cultivator	E. M. Graham	139, 001	May 20, 1873	488	154	3	561
Cultivator	J. M. Gustin	141, 786	Aug. 12, 1873	346	114	4	171
Cultivator	W. G. Halburt	134, 662	Jan. 7, 1873	155	51	3	19
Cultivator	L. Haverstick	144, 846	Nov. 25, 1873	597	203	4	560
Cultivator	J. M. Heiges	134, 665	Jan. 7, 1873	158	52	3	19
Cultivator	J. Helm	138, 085	Apr. 22, 1873	749	237	3	452
Cultivator	J. B. Hinckley	135, 912	Feb. 18, 1873	493	159	3	192
Cultivator	J. M. Knox	137, 933	Apr. 15, 1873	595	187	3	430
Cultivator	H. K. Kriebel	136, 249	Feb. 25, 1873	792	257	3	227
Cultivator	O. Kugler	141, 145	July 22, 1873	739	244	4	96
Cultivator	O. Kugler	141, 146	July 22, 1873	740	245	4	97
Cultivator	A. Leonard	137, 782	Apr. 15, 1873	469	147	3	419
Cultivator	M. Lewellin	137, 221	Mar. 25, 1873	792	262	3	338
Cultivator	W. Lewis	143, 019	Sept. 23, 1873	621	211	4	325
Cultivator	P. Long	139, 320	May 27, 1873	791	252	3	592
Cultivator	E. P. Lynch	143, 172	Sept. 23, 1873	740	255	4	335
Cultivator	J. P. Manny	139, 471	June 3, 1873	24	7, 8	3	611
Cultivator	J. R. McDonald	137, 703	Apr. 8, 1873	387	120	3	400
Cultivator	A. S. McDonell	144, 346	Nov. 4, 1873	144	48	4	490
Cultivator	K. McKinnon	136, 254	Feb. 25, 1873	798	259	3	228
Cultivator	J. Mills	135, 997	Feb. 18, 1873	562	185	3	197
Cultivator	B. F. Muschert	140, 724	July 8, 1873	338	114	4	47
Cultivator	W. T. Parker	135, 726	Feb. 11, 1873	315	100	3	164
Cultivator	J. H. Pattee	135, 148	Jan. 21, 1873	598	195	3	83
Cultivator	F. Perez	143, 380	Sept. 30, 1873	933	316	4	366
Cultivator	H. H. Perkins	137, 478	Apr. 1, 1873	179	57	3	372
Cultivator	W. H. Platt	137, 024	Mar. 18, 1873	602	200	3	312
Cultivator	O. M. Pond	137, 094	Mar. 25, 1873	676	225	3	329
Cultivator	G. R. Richardson and J. Behel	139, 478	June 3, 1873	31	10	3	611
Cultivator	R. B. Robbins	141, 462	Aug. 5, 1873	47	15	4	139
Cultivator	A. Roden	145, 901	Dec. 23, 1873	783	256	4	685
Cultivator	R. Rust	139, 193	May 20, 1873	668	209	3	575
Cultivator	J. Sherrill	134, 615	Jan. 7, 1873	107	35	3	15
Cultivator	M. P. Simpson and J. P. Ellacott	140, 437	July 1, 1873	78	28	4	14
Cultivator	Z. B. Sims	135, 165	Jan. 21, 1873	610	199	3	84
Cultivator	J. E. Sisson	145, 535	Dec. 16, 1873	460	150	4	646
Cultivator	G. Slusser	145, 690	Dec. 16, 1873	587	192	4	657
Cultivator	A. C. Smith	145, 691	Dec. 16, 1873	588	193	4	657
Cultivator	J. W. Swickard	136, 108	Feb. 18, 1873	660	216	3	205
Cultivator	W. Taylor	135, 736	Feb. 11, 1873	323	103	3	165
Cultivator	C. Thede	138, 451	Apr. 29, 1873	1, 098	347	3	488
Cultivator	A. C. Tower	134, 824	Jan. 14, 1873	309	98, 99	3	45
Cultivator	G. Waggoner	134, 949	Jan. 14, 1873	416	133	3	53
Cultivator	W. T. Walker	138, 964	May 13, 1873	443	139	3	544
Cultivator	P. F. Wells	139, 985	June 17, 1873	500	158	3	672
Cultivator	E. Wiard	136, 574	Mar. 4, 1873	200	66	3	261
Cultivator	W. Willerton	136, 477	Mar. 4, 1873	107	36	3	254
Cultivator	B. W. Wingo	145, 038	Nov. 25, 1873	757	256	4	574
Cultivator	B. Witter	135, 872	Feb. 11, 1873	443	144	3	174
Cultivator	S. L. Young	136, 297	Feb. 4, 1873	839	271	3	231
Cultivator, Corn	I. Emrick	135, 414	Feb. 25, 1873	19	6	3	129
Cultivator, Corn	N. G. Blauser	141, 988	Aug. 19, 1873	529	175	4	195
Cultivator, Cotton	F. L. Bates	138, 555	May 6, 1873	79	26	3	504
Cultivator, Cotton	N. Bell and H. Winfield	134, 632	Jan. 7, 1873	124	40	3	16
Cultivator, Cotton	E. H. Nelson	142, 501	Sept. 2, 1873	162	52	4	255
Cultivator, Cotton	C. F. Reams	137, 959	Apr. 15, 1873	616	194	3	431
Cultivator, Cotton	C. Zoehner	139, 750	June 10, 1873	295	91	3	648
Cultivator draft-hook	A. Adams	139, 752	June 10, 1873	297	91	3	648
Cultivator, Hand	S. A. Conrad	145, 153	Dec. 2, 1873	106	35	4	594
Cultivator, Hand	L. J. Dawdy	136, 220	Feb. 25, 1873	768	248	3	225
Cultivator, Hand	A. W. Ross	144, 927	Nov. 25, 1873	661	224	4	566
Cultivator, Hand	G. W. Rue	137, 098	Mar. 25, 1873	679	226	3	329
Cultivator-plow	K. McKinnon	145, 222	Dec. 2, 1873	165	57	4	598
Cultivator, Rotary	R. McKinley	139, 013	May 20, 1873	498	157	3	561
Cultivator, Rotary	J. W. Milroy	135, 002	Jan. 21, 1873	476	152	3	73
Cultivator, Rotary	C. N. Poundstone	135, 664	Feb. 11, 1873	262	83	3	160
Cultivator, Rotary	J. D. Starritt	144, 419	Nov. 11, 1873	220	73	4	508
Cultivator, Sugar-cane	A. Tronard	135, 174	Jan. 21, 1873	618	201	3	85
Cultivator-teeth	G. F. Stroud	141, 400	July 29, 1873	998	324	4	124
Cultivator-teeth, Manufacture of	J. Behel	139, 535	June 3, 1873	77	26	3	615
Cultivator, Tobacco	Z. D. Blakistone	136, 898	Mar. 18, 1873	496	164	3	303
Cultivator, Wheel	G. Bradley	145, 331	Dec. 9, 1873	268	90	4	619
Cultivator, Wheel	J. F. Matchet and P. W. Smith	143, 631	Oct. 14, 1873	215	72	4	407
Cultivator, Wheel	J. H. Randolph, jr.	138, 931	May 13, 1873	417	131	3	542
Cultivator, Wheel	W. H. Strong	146, 030	Dec. 30, 1873	915	297	4	706
Cup:							
See Breast-cup.							
Drinking-cup.							
Lubricating-cup.							
Mucilage-cup.							
Oil-cup.							
Sponge-cup.							
Cupboard and extension-table combined	B. F. Partridge	135, 440	Feb. 4, 1873	44	13	3	131

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Cupboard, Refrigerating.....	J. H. Polhamus	135,442	Feb. 4, 1873	45	14	3	131
Cupola and other furnaces.....	L. Quinke	143,463	Oct. 7, 1873	56	19	4	385
Cupola and other metallurgic furnaces.....	O. Bolton, jr	137,125	Mar. 25, 1873	705	234	3	331
Cupola-furnace	P. W. Mackenzie.....	138,510	May 6, 1873	37	12	3	500
Cupola-furnace	J. B. Pearse	138,184	Apr. 22, 1873	833	264	3	458
Curling-iron	J. S. Morg	144,471	Nov. 11, 1873	259	87	4	511
Curling-iron	L. Rosenstein and S. Feder.....	141,079	July 22, 1873	679	228	4	92
Curls, Artificial.....	J. Graham	136,720	Mar. 11, 1873	335	111	3	281
Currency and postage-stamp holder.....	S. V. Beckwith.....	139,492	June 3, 1873	45	14	3	612
Current, Means of creating artificial.....	E. Bantz	139,854	June 17, 1873	391	122	3	663
Current-wheel	C. Weeke	141,301	July 29, 1873	900	295	4	117
Currier's tool	C. A. Gardner and J. A. Enos.....	137,671	Apr. 8, 1873	358	111	3	397
Curry-comb	S. A. Morton	145,891	Dec. 23, 1873	772	252	4	684
Curry-comb	A. H. Reid	145,242	Dec. 2, 1873	182	63	4	600
Curry-comb	J. W. Trussell.....	145,033	Nov. 25, 1873	753	254	4	574
Curtain-cord fastener.....	J. P. Arnold.....	139,228	May 27, 1873	708	223	3	586
Curtain-cord fastener.....	C. Gammel.....	138,878	May 13, 1873	377	118	3	538
Curtain-cord fastener.....	H. Lull	139,404	May 27, 1873	869	278	3	599
Curtain-cord rack	W. D. Ludlow.....	134,812	Jan. 14, 1873	296	95	3	44
Curtain-fastener	J. F. A. Blätterlein.....	141,313	July 29, 1873	909	298	4	118
Curtain-fixture	G. W. Beers.....	137,405	Apr. 1, 1873	111	36	3	366
Curtain-fixture	C. Buckley	136,030	Feb. 18, 1873	590	194	3	200
Curtain-fixture	H. H. Burritt	143,494	Oct. 7, 1873	82	28	4	387
Curtain-fixture	H. H. Burritt	145,785	Dec. 23, 1873	681	223	4	677
Curtain-fixture	G. B. Cowles	134,980	Jan. 21, 1873	453	145	3	72
Curtain-fixture	L. J. Earll	140,901	July 15, 1873	499	168	4	68
Curtain-fixture	C. E. Fritts	138,493	May 6, 1873	21	8	3	499
Curtain-fixture	S. and M. Henry.....	145,868	Dec. 23, 1873	752	245	4	682
Curtain-fixture	A. D. and E. M. Judd.....	137,450	Apr. 1, 1873	152	49	3	369
Curtain-fixture	S. Ker	135,562	Feb. 4, 1873	155	50	3	140
Curtain-fixture	A. E. Lazell.....	139,719	June 10, 1873	263	82	3	646
Curtain-fixture	H. E. Marchand.....	144,342	Nov. 4, 1873	141	47	4	490
Curtain-fixture	W. W. Massey	145,669	Dec. 16, 1873	569	187	4	655
Curtain-fixture	C. C. Moore	145,359	Dec. 9, 1873	290	97	4	621
Curtain-fixture	P. W. Phillips.....	137,480	Apr. 1, 1873	181	57	3	372
Curtain-fixture	T. Symonds.....	138,054	Apr. 22, 1873	723	229	3	449
Curtain-fixture	H. L. Traphagen	135,950	Feb. 18, 1873	523	171	3	194
Curtain-fixture	F. Walker	140,976	July 15, 1873	574	193	4	74
Curtain-fixture	H. K. Warner and C. E. Smith.....	145,821	Dec. 23, 1873	709	233	4	679
Curtain-fixture	W. A. Wheelodon	136,195	Feb. 25, 1873	750	242	3	224
Curtain-fixture	J. F. Wollensak	145,040	Nov. 25, 1873	759	256	4	574
Curtain-fixture, Cord-tightener for.....	H. L. Judd	135,561	Feb. 4, 1873	154	49	3	140
Curtain-fixture rack	J. Pusey	137,320	Apr. 1, 1873	38	12	3	360
Curtain-hook	H. L. Judd	139,676	June 10, 1873	218	70	3	642
Curtain, Roller for window	W. W. Grier	138,749	May 13, 1873	262	82	3	529
Curtain-roller holder.....	B. G. Fitzhugh.....	138,014	Apr. 22, 1873	682	215	3	446
Curtain-tassel clip	F. Müller	140,295	June 24, 1873	789	250	3	704
Cushion:							
See Billiard-cushion.							
Billiard-table cushion.							
Needle-cushion.							
Spring-cushion.							
Cutlery, &c., Metallic compound for coating.....	J. Zimmer	135,028	Jan. 21, 1873	500	.....	3	75
Cutlery, Table.....	C. McDonald.....	135,136	Jan. 21, 1873	589	191	3	82
Cut-off and regulating cock for gas	C. E. Seal	140,549	July 1, 1873	176	60	4	23
Cut-off and reversing valve-gear for engine.....	R. M. Fryer.....	135,794	Feb. 11, 1873	377	{ 121 122 }	3	169
Cut-off for cistern	G. W. Howell	142,569	Sept. 9, 1873	230	75	4	272
Cut-off for cistern	C. Wuerz	142,832	Sept. 16, 1873	459	156	4	301
Cut-off for fire-plug system	F. W. Eames	135,976	Feb. 18, 1873	541	180	3	196
Cut-off for steam-engine, Variable	W. Wright.....	139,224	May 20, 1873	692	218	3	577
Cut-off, Rain-water	J. W. Wetmore.....	137,268	Mar. 25, 1873	835	274	3	341
Cut-off valve, Rotary balanced.....	P. Shellenback and F. Brilmayer.....	136,622	Mar. 11, 1873	257	86	3	275
Cutter:							
See Angle-iron cutter.							
Bolt-cutter.							
Bolt and rivet cutter.							
Bolt and rod cutter.							
Butter-cutter.							
Button-hole cutter.							
Cake-cutter.							
Candy-cutter.							
Cheese-cutter.							
Cigar-tip cutter.							
Feed-cutter.							
Harvester-cutter.							
Hoop-lock cutter.							
Meat and vegetable cutter.							
Paper-cutter.							
Peach-cutter.							
Peg-cutter.							
Potato-cutter.							
Relisher and wedge cutter.							
Rotary-cutter.							
Sausage-cutter.							
Sewing-machine cutter.							
Sewing-machine thread-cutter.							
Sod-cutter.							
Stalk-cutter.							
Stone-cutter.							
Straw-cutter.							
Thread-cutter.							
Tobacco-cutter.							
Tobacco-plant cutter.							
Tube-cutter.							

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Cutter—Continued.							
See Twine-cutter.							
Vegetable-cutter.							
Veneer-cutter.							
Washer-cutter.							
Wrench and bolt cutter.							
Cutter-bar in grinding, Device for holding	W. H. Daniels	138, 136	Apr. 22, 1873	787	251	3	455
Cutter-head	D. C. Allen	141, 744	Aug. 12, 1873	303	99	4	168
Cutter-head	E. Benjamin	142, 669	Sept. 9, 1873	314	104	4	279
Cutter-head	J. F. W. Erdmann	140, 905	July 15, 1873	503	169	4	68
Cutter-head	H. Fletcher	143, 565	Oct. 14, 1873	158	53	4	402
Cutter-head	A. H. Shipman	142, 048	Aug. 19, 1873	592	195	4	200
Cylinder boring and facing machine	J. McDonald	143, 917	Oct. 21, 1873	487	164	4	438
Cylinder-engine, Triple	P. Brotherhood	145, 719	Dec. 23, 1873	624	205	4	672
Cylinder facing-machine	T. M. Henderson and F. L. McDonald	145, 103	Dec. 2, 1873	59	19	4	590
Cylinder-heads, Machine for grinding	J. Shirrell	142, 874	Sept. 16, 1873	443	168	4	304
Cylinder-lubricator, Steam	L. F. Smith	140, 958	July 15, 1873	555	186	4	72
Cylinder-press, Fan-fly attachment for	P. A. Cotter	137, 597	Apr. 8, 1873	294	91	3	392
Dam, Self-acting	H. Werner	135, 023	Jan. 21, 1873	496	159	3	75
Damper and ventilator	J. L. Skinner	141, 601	Aug. 5, 1873	165	53	4	148
Damper for windows, Fire	M. J. Barwick	139, 999	June 17, 1873	513	163	3	673
Damper, Hot-air furnace	A. C. Warren	136, 291	Feb. 25, 1873	833	269	3	230
Damper-regulator	B. Fitts	135, 103	Jan. 21, 1873	557	182	3	80
Damper, Stove	E. F. Cook	145, 989	Dec. 30, 1873	881	285	4	703
Damper, Stove	H. H. Huntley	144, 676	Nov. 18, 1873	439	148	4	537
Damper, Stove	J. D. Willoughby	135, 611	Feb. 4, 1873	209	65	3	143
Damper, Stove	R. Worster	144, 043	Oct. 28, 1873	620	205	4	459
Damper, Stove-pipe	E. C. Chapman	144, 192	Nov. 4, 1873	19	5	4	480
Damper, Stove-pipe	E. K. Dean	136, 042	Feb. 18, 1873	600	197	3	200
Damper, Stove-pipe	J. Emmert	138, 997	May 20, 1873	985	153	3	560
Damper, Stove-pipe	J. M. Read	144, 634	Nov. 18, 1873	405	136	4	534
Dash-board	J. S. Campbell	141, 758	Aug. 12, 1873	317	104	4	169
Dash-board bag	S. Hipkiss	140, 416	July 1, 1873	63	22	4	13
Deck-light	I. M. Bearse	136, 299	Feb. 25, 1873	840	272	3	231
Dental-chair stool	T. B. Downs and W. D. Morris	138, 796	May 13, 1873	305	94	3	532
Dental clamp	C. E. Blake	138, 370	Apr. 29, 1873	1, 025	323	3	482
Dental drill	J. W. Baxter	139, 039	May 20, 1873	519	164	3	563
Dental drill, Automatic	M. I. Gallagher	135, 109	Jan. 21, 1873	563	183	3	81
Dental drilling-machine	C. E. Edwards	145, 098	Dec. 2, 1873	56	17	4	590
Dental engine	C. M. Curtis	138, 318	Apr. 29, 1873	983	309	3	498
Dental filling	C. E. Blake	145, 275	Dec. 9, 1873	217	74	4	615
Dental filling, Porcelain block for	C. H. Mack	139, 012	May 20, 1873	498	157	3	561
Dental foil	C. E. Blake	145, 274	Dec. 9, 1873	217	74	4	615
Dental forceps	C. G. French	145, 058	Dec. 2, 1873	17	6	4	587
Dental gold, Manufacture of	R. S. Williams	140, 984	July 15, 1873	582	196	4	75
Dental plugger	J. T. Codman	145, 051	Dec. 2, 1873	9	3	4	586
Dental tool-rack	G. E. Hays	144, 539	Nov. 11, 1873	318	108	4	515
Dentist's drill, Diamond-pointed	J. P. Gillespie	137, 434	Apr. 1, 1873	139	45	3	368
Dentist's flask	C. Bailey	137, 589	Apr. 8, 1873	287	89	3	392
Dentists, Preparing gold for	R. S. Williams	137, 747	Apr. 8, 1873	432	133	3	403
Dentist's stool	I. W. Lyon	135, 435	Feb. 4, 1873	40	12	3	130
Dentist's tool	C. P. Grout	138, 150	Apr. 22, 1873	798	255	3	456
Deodorizing animal matters for fertilizers, &c.	E. C. C. Stanford	137, 969	Apr. 15, 1873	626	205	3	432
Deodorizing oil obtained from acid tar of oil refineries	R. Gaggin	138, 629	May 6, 1873	142	47	3	509
Derrick	F. Donald and G. S. Newton	135, 785	Feb. 11, 1873	364	117	3	168
Derrick	A. K. Richmond	145, 899	Dec. 23, 1873	780	255	4	684
Derrick	J. E. Serrell	142, 740	Sept. 9, 1873	372	125	4	284
Derrick	J. E. Walsh	138, 215	Apr. 22, 1873	859	272	3	460
Derrick and crane	J. W. Kennedy	134, 677	Jan. 7, 1873	169	56	3	20
Desk	G. and J. A. Schaft	138, 585	May 6, 1873	105	33	3	506
Desk and book-case	J. A. Payne	139, 419	May 27, 1873	880	282	3	600
Desk and seat, School	A. E. Roberts	138, 045	Apr. 22, 1873	714	225	3	449
Desk and seat, School	J. B. Sherwood	137, 866	Apr. 15, 1873	540	168	3	425
Desk-cover	J. Heymann	144, 027	Oct. 28, 1873	608	201	4	458
Desk, School	J. W. Childs	139, 543	June 3, 1873	84	29	3	616
Desk, School	S. Cox and W. W. Fanning	135, 089	Jan. 21, 1873	547	178	3	79
Desk, School	C. J. Higgins	143, 760	Oct. 21, 1873	355	118	4	427
Desk, School	C. H. Presbrey	135, 154	Jan. 21, 1873	602	196	3	83
Desk, School	M. C. Stebbins and E. J. Piper	137, 732	Apr. 8, 1873	415	128	3	402
Desk, School	D. G. Venable	137, 263	Mar. 25, 1873	831	273	3	341
Desk, School	F. A. Wilber	140, 979	July 15, 1873	576	194	4	74
Desk, Seat for school	J. Cooley	145, 930	Dec. 30, 1873	828	270	4	699
Desk, &c., Writing	D. Schafer	144, 636	Nov. 18, 1873	407	137	4	534
Desulphurizing furnace, Ore	E. C. Hegeler and F. W. Matthiessen	144, 904	Nov. 25, 1873	640	218	4	564
Dials, Transmitting time-movements to distant	H. J. Wenzel	140, 661	July 8, 1873	286	97	4	43
Diamond-gage	W. Shumard	135, 249	Jan. 28, 1873	714	228	3	105
Diamond into blocks or saw-teeth, Mode of fastening	T. Smith	139, 337	May 27, 1873	801	256	3	594
Diamond, Method of setting black	T. W. Baxter	134, 968	Jan. 21, 1873	442	142	3	71
Diamonds or carbon-points in face of metal tools. Setting.	W. McKenna	143, 021	Sept. 23, 1873	622	212	4	325
Dice-box	J. Twamly	143, 599	Oct. 14, 1873	185	63	4	404
Die:							
See Carriage-clip die.							
Frower-die.							
Hammer-die.							
Hat-pressing die.							
King-bolt die.							
Punching-die.							
Screw-capping die.							
Screw-cutting die.							
Screw-threading die.							
Wrench-bar die.							
Wrench-head die.							

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Die-plate	F. D. Bliss	135,314	Jan. 28, 1873	763	247	3	109
Die-rolling machine	H. Waters	137,984	Apr. 15, 1873	637	201	3	433
Digger: <i>See</i> Post-hole. Potato.							
Dinner-can	A. A. Arnold	139,851	June 17, 1873	389	121	3	663
Dining-table	A. Land	137,779	Apr. 15, 1873	466	146	3	419
Dining-table	G. L. Motter	136,381	Mar. 4, 1873	27	10	3	247
Dip-pipe in gas-works, Sealing	H. H. Edgerton	137,425	Apr. 1, 1873	129	42	3	367
Dip-pipe of gas-works, Sealing	E. Jones	144,619	Nov. 18, 1873	394	132	4	533
Direct-acting steam-engine	J. Bailey	136,806	Mar. 18, 1873	419	139	3	297
Dish-cover	A. J. Ohmer	136,856	Mar. 18, 1873	460	153	3	301
Dish-drainer	W. H. Gould	141,643	Aug. 12, 1873	220	69	4	161
Dish-heater	S. S. Fitch	140,769	July 15, 1873	381	131	4	59
Dish-pan	S. Lafferty	139,252	May 27, 1873	733	231	3	588
Dish-stand, Table	F. Grosjean	140,623	July 8, 1873	256	87	4	40
Dish-washer	C. Bartlett	145,042	Dec. 2, 1873	1	1	4	586
Dish-washing machine	J. Usher	135,176	Jan. 21, 1873	619	202	3	85
Dish-washing machine	C. H. Williams	143,484	Oct. 7, 1873	73	25	4	386
Disinfectant compound	J. Hilton	141,274	July 29, 1873	877		4	115
Disinfectant package	W. P. Tenny	142,963	Sept. 16, 1873	569	192	4	311
Disinfecting and deodorizing apparatus for water-closets	J. M. B. Baker	141,100	July 22, 1873	698	234	4	93
Disinfecting compound	J. W. Lee and J. W. Davis	145,433	Dec. 9, 1873	353		4	626
Disinfecting powder	H. G. Dayton	141,546	Aug. 5, 1873	119		4	145
Disinfecting soap-boiling establishment	S. Strunz	138,954	May 13, 1873	435	137	3	543
Disintegrating fabric, Machine for	M. Marshall	143,290	Sept. 30, 1873	846	291	4	360
Distillation, Apparatus for treating grain for	A. Woolner	139,749	June 10, 1873	294	91	3	648
Distilling apparatus	G. Hunziker	136,921	Mar. 18, 1873	515	170	3	305
Distilling heavy oils, Apparatus for	H. Ryder	142,515	Sept. 2, 1873	173	56	4	255
Distilling petroleum	A. W. Wilkinson	145,707	Dec. 16, 1873	605		4	658
Distilling pure alcoholic spirits	C. Andersen	143,654	Oct. 14, 1873	233	79	4	408
Distilling together spirits of turpentine and alcoholic liquid	W. Corfield	136,137	Feb. 25, 1873	706		3	220
Ditching and grading machine	L. D. Noble	137,318	Apr. 1, 1873	36	11	3	360
Ditching-machine	C. M. Brown	139,765	June 10, 1873	309	96	3	649
Ditching-machine	J. W. Fauver	142,222	Aug. 26, 1873	754	249	4	223
Ditching-machine	H. Gonellaz	140,820	July 15, 1873	428	145	4	62
Ditching-machine	W. T. Hoskins	135,807	Feb. 11, 1873	393	127	3	170
Ditching-machine	J. W. Humphreys	134,991	Jan. 21, 1873	463	148	3	72
Ditching-machine	J. W. Humphreys	145,736	Dec. 23, 1873	641	209	4	673
Ditching-machine	G. W. Nevill	136,752	Mar. 11, 1873	362	119	3	283
Ditching-machine	R. Starbrick	135,605	Feb. 4, 1873	202	63	3	143
Dividers, Extension	G. C. Miller	144,468	Nov. 11, 1873	257	86	4	511
Dividers, Pencil-attachment for	W. Schollhorn	140,081	June 17, 1873	587	186	3	680
Dock, Building	A. W. Thompson and J. Pattison	136,560	Mar. 4, 1873	187	60	3	260
Doll	H. C. Work	140,605	July 8, 1873	242	82	4	39
Doll-joint	J. A. H. Ellis	139,130	May 20, 1873	607	190	3	570
Dolls, Manufacture of	I. F. Walker	144,373	Nov. 4, 1873	166	55	4	492
Domino	B. Louineau	143,703	Oct. 14, 1873	287	94	4	412
Domino	W. X. Stevens	139,928	June 17, 1873	459	143	3	669
Door, Air-cushion for	J. W. Wetmore	142,540	Sept. 2, 1873	195	63	4	257
Door and gate bolt	J. Smith	145,131	Dec. 2, 1873	90	29	4	592
Door and gate spring	S. L. Bean and L. Mills	136,482	Mar. 4, 1873	112	37	3	254
Door and gate spring	J. T. Foster	137,770	Apr. 15, 1873	460	143	3	418
Door and gate spring	C. N. Owen	137,619	Apr. 8, 1873	310	97	3	394
Door and window guard	J. W. White	145,772	Dec. 23, 1873	672	219	4	676
Door-bolt	S. D. Arnold	138,360	Apr. 29, 1873	1,016	320	3	481
Door-bolt	A. G. Hofstatter	137,841	Apr. 15, 1873	520	162	3	423
Door-bolt	J. Jones	137,211	Mar. 25, 1873	785	259	3	337
Door-bolt	A. Pelham	136,861	Mar. 18, 1873	463	154	3	301
Door-bolt	J. S. R. Wright	137,994	Apr. 15, 1873	647	204	3	434
Door-bolt mechanism, Prison	T. R. and J. Pullis	138,099	Apr. 22, 1873	759	241	3	452
Door-button	O. F. Fogelstrand	135,215	Jan. 28, 1873	677	219	3	102
Door-check	J. Bader	144,246	Nov. 4, 1873	68	22	4	483
Door-check	L. Goodyear	141,435	Aug. 5, 1873	23	7	4	137
Door-check	A. Hanna	135,115	Jan. 21, 1873	567	185	3	81
Door-check	G. C. Idly	136,731	Mar. 11, 1873	345	114	3	282
Door-check	J. P. Israel and D. W. McLane	140,139	June 24, 1873	659	207	3	693
Door-check	J. and A. Kolb	135,340	Jan. 28, 1873	797	257	3	111
Door-check	J. A. McNabb	141,577	Aug. 5, 1873	144	46	4	147
Door-check	M. R. Perkins	144,222	Nov. 4, 1873	46	14	4	482
Door-check	B. Poulson	137,237	Mar. 25, 1873	806	265	3	339
Door-check	G. E. Rittenhouse	139,082	May 20, 1873	563	176	3	566
Door-check	G. Rohrbaker	134,612	Jan. 7, 1873	105	34	3	15
Door check and retainer	G. H. Worster	138,551	May 6, 1873	76	25	3	504
Door-closing apparatus	H. F. Shaw	141,896	Aug. 19, 1873	457	144	4	189
Door, Construction of	W. W. J. Toussaint	140,799	July 15, 1873	407	138	4	61
Door-fastener	H. Orcutt	141,724	Aug. 12, 1873	287	94	4	166
Door-fastening, Barn	A. D. Wright and A. Roys	135,027	Jan. 21, 1873	499	161	3	75
Door-fastening, Sliding	E. W. Staples, jr.	141,019	July 22, 1873	627	211	4	88
Door, gate, &c., spring	R. Espey	135,192	Jan. 21, 1873	632	206	3	86
Door-hanger	S. L. Bignall	143,557	Oct. 14, 1873	153	51	4	401
Door-hanger	A. K. Rider	141,382	July 29, 1873	980	318	4	123
Door, Hanging	G. Heegler	134,542	Jan. 7, 1873	36	12	3	10
Door, Illuminating	T. Hyatt	145,183	Dec. 2, 1873	136	44	4	596
Door-key	J. Collins	145,401	Dec. 9, 1873	325	110	4	624
Door-key, Folding	J. Seibert	135,600	Feb. 4, 1873	199	61	3	143
Door-lock	H. H. Elwell	136,049	Feb. 18, 1873	606	199	3	201
Door-lock	T. Kromer	140,377	July 1, 1873	35	12	4	11
Door-lock, Freight-car	W. S. Brewster	135,402	Feb. 4, 1873	6	3	3	128
Door-lock, Sliding	A. W. Cram	139,118	May 20, 1873	595	187	3	569
Door-lock strike or keeper	J. Scott	138,048	Apr. 22, 1873	718	226	3	449
Door, &c., Machine for relishing	F. D. Green	136,505	Mar. 4, 1873	133	43	3	256
Door-plate and indicator	T. M. and W. F. Tobin	137,508	Apr. 1, 1873	212	64	3	374
Door-plate and letter-chute, Combined	B. Morningstar	137,946	Apr. 15, 1873	605	190	3	431

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Door, safe, &c., Burglar-proof	G. Little	137, 456	Apr. 1, 1873	159	50	3	370
Door-securer	W. H. Phipps	144, 223	Nov. 4, 1873	46	14	4	482
Door-securer and key-ring, Combined	J. P. Tuck	144, 642	Nov. 18, 1873	414	139	4	535
Door-spring	H. Cody	144, 256	Nov. 4, 1873	74	24	4	484
Door-spring	S. Cutler	136, 974	Mar. 18, 1873	557	185	3	308
Door-spring	D. Dick	139, 458	June 3, 1873	14	4	3	610
Door-spring	G. Geer	136, 371	Mar. 4, 1873	19	7	3	247
Door-spring	L. J. Higgins	137, 367	Apr. 1, 1873	80	26	3	363
Door-spring	A. D. Hoffman	135, 914	Feb. 18, 1873	495	160	3	192
Door-spring	W. M. Kellie	136, 923	Mar. 18, 1873	516	170	3	305
Door-spring	C. W. Oldham	140, 638	July 8, 1873	269	91	4	41
Door-spring	F. H. Richards	144, 926	Nov. 25, 1873	660	224	4	566
Door-spring	W. T. Rossiter	145, 244	Dec. 2, 1873	183	63	4	600
Door-spring	A. Tittman	140, 446	July 1, 1873	86	30	4	15
Door-spring	M. L. Webster	139, 037	May 20, 1873	516	163	3	563
Door-threshold	O. G. Thomas	138, 300	Apr. 29, 1873	967	304	3	477
Doors, Automatic catch for sliding	A. W. Gibbs	145, 644	Dec. 16, 1873	549	180	4	654
Doors, Rail for sliding	J. Collins	145, 630	Dec. 16, 1873	536	176	4	653
Double-tree	W. Martin	143, 173	Sept. 23, 1873	741	255	4	335
Doubling and twisting machine, Stopping-mechanism for	W. Cockcroft and R. Ackroyd	142, 374	Sept. 2, 1873	47	16	4	246
Dough kneading and mixing machine	E. Edwards	136, 144	Feb. 25, 1873	711	{ 229 230 }	3	221
Dough-machine	O. B. Fuller	140, 695	July 8, 1873	315	107	4	45
Dough-sheeting machine	O. B. Fuller	144, 666	Nov. 18, 1873	431	146	4	536
Doughnut-mold	G. Machlet	137, 142	Mar. 25, 1873	718	238	3	332
Dovetail-cutting machinery	W. T. Hamilton	144, 536	Nov. 11, 1873	314	{ 106 107 }	4	515
Dovetail-machine	A. C. Van Alstine	141, 096	July 22, 1873	694	233	4	93
Dovetailing-machine	T. Cullen	137, 830	Apr. 15, 1873	508	159	3	422
Dovetailing-machine	A. Davis	139, 299	May 27, 1873	775	246	3	591
Dovetailing-machine	F. D. Green	136, 236	Feb. 25, 1873	780	252	3	226
Dovetailing-machine	J. E. Haskell	136, 374	Mar. 4, 1873	21	7	3	247
Dovetailing-machine	W. F. Moody	137, 315	Apr. 1, 1873	32	10, 11	3	359
Dovetails, Device for marking	G. Ashby	145, 477	Dec. 16, 1873	398	131	4	641
Dowel-pin, Machine for making	M. Everts	135, 416	Feb. 4, 1873	22	6	3	129
Draft-equalizer	J. P. Beckenbaugh	144, 052	Oct. 28, 1873	629	207	4	460
Draft-equalizer	E. H. Blake	145, 983	Dec. 30, 1873	877	284	4	703
Draft-equalizer	O. N. Collins and P. B. Stiles	145, 474	Dec. 9, 1873	390	128	4	629
Draft-equalizer	W. W. Hinman	143, 696	Oct. 14, 1873	277	91	4	411
Draft-equalizer	W. McClelland, sr.	146, 011	Dec. 30, 1873	901	292	4	705
Draft-equalizer	J. Parker	141, 813	Aug. 12, 1873	369	121	4	173
Draft-equalizer for wagons, Draw-bar in	R. M. Orput	144, 694	Nov. 18, 1873	457	155	4	538
Draft-elevator	R. Bunker	137, 286	Apr. 1, 1873	6	2	3	357
Draft-regulator for stove and furnace, Automatic	A. W. Sprague and J. M. Osgood	137, 632	Apr. 8, 1873	321	100	3	394
Drain	G. R. Moore	135, 723	Feb. 11, 1873	313	99	3	164
Drain-pipe	W. G. Monk	135, 721	Feb. 11, 1873	313	.....	3	164
Drain-pipes, Machine for making	A. Müller	142, 930	Sept. 16, 1873	538	184	4	308
Drain, Sediment	G. R. Moore	136, 608	Mar. 11, 1873	241	81	3	274
Drain-tile laying apparatus	G. W. Nevill	136, 751	Mar. 11, 1873	361	119	3	283
Draining basins, Means for	L. R. Comstock	140, 577	July 8, 1873	216	72	4	37
Draw-bolt blank	D. B. Oliver	136, 757	Mar. 11, 1873	366	121	3	284
Drawer-lock	E. G. Gorey	138, 148	Apr. 22, 1873	797	254	3	455
Drawer-locking device	L. Renker	141, 461	Aug. 5, 1873	47	14	4	139
Drawer-pull	C. S. and E. A. Barnard	135, 754	Feb. 11, 1873	340	109	3	166
Drawers	B. J. Greely	138, 017	Apr. 22, 1873	684	216	3	446
Drawers	F. Rose	136, 869	Mar. 18, 1873	469	155	3	301
Drawers, Device for locking a series of	W. F. Daly	140, 481	July 1, 1873	116	40	4	18
Drawers, Device for locking a series of	C. A. Stock	137, 391	Apr. 1, 1873	101	33	3	365
Drawers, Men's	E. L. Closse	142, 000	Aug. 19, 1873	541	178	4	196
Drawers, Supporter for Men's	E. R. Cleaveland	137, 761	Apr. 15, 1873	451	140	3	418
Drawing-board	A. Hitchcock	139, 507	June 3, 1873	56	18	3	613
Drawing-board	T. H. Kane	134, 550	Jan. 7, 1873	44	14	3	11
Drawing-board	W. Keuffel and H. Esser	138, 896	May 13, 1873	390	122	3	539
Drawing-board	H. H. Meyer	139, 411	May 27, 1873	874	280	3	599
Drawing-board trestle	J. H. Harden	145, 174	Dec. 2, 1873	127	42	4	595
Drawing, Device for teaching	A. C. Covell	139, 237	May 27, 1873	720	227	3	587
Drawing-frames, &c., Stop-motion for	A. I. Earle	138, 868	May 13, 1873	366	114	3	537
Drawing-frames, Stop-motion for	P. J. Wright and J. Thompson	139, 447	May 27, 1873	902	291	3	601
Drawing-frames, Stopping mechanism for	J. C. Taft	144, 162	Oct. 28, 1873	720	240	4	467
Drawing-frames, &c., Top-roll for	H. T. Potter	142, 509	Sept. 2, 1873	168	55	4	255
Drawing-knife	M. Brooks	145, 485	Dec. 16, 1873	405	133	4	642
Drawing-knife	E. Parker	142, 720	Sept. 9, 1873	353	119	4	282
Drawing-roll	H. T. Robbins	143, 256	Sept. 30, 1873	821	281	4	357
Drawing-rolls, Instrument for	E. E. Stebbins	138, 053	Apr. 22, 1873	722	228	3	449
Drawing-table and desk combined	J. A. Wilkens	145, 378	Dec. 9, 1873	393	102	4	622
Dredge-box	T. Smith	135, 048	Jan. 21, 1873	520	168	3	77
Dredge, Salt and pepper	D. C. Ripley	142, 351	Sept. 2, 1873	26	10	4	244
Dredger	E. B. Bishop	137, 998	Apr. 22, 1873	664	211	3	445
Dredger	A. C. Both	138, 227	Apr. 29, 1873	893	282	3	472
Dredger	J. F. Morse	142, 577	Sept. 9, 1873	237	77	4	273
Dredger	R. G. Packard	134, 817	Jan. 14, 1873	300	97	3	44
Dredger	T. Symonds	136, 187	Feb. 25, 1873	745	240	3	223
Dredger	T. Symonds	138, 295	Apr. 29, 1873	964	303	3	477
Dredging apparatus	E. Bazin	143, 269	Sept. 30, 1873	831	{ 285 286 }	4	358
Dredging-machine	A. Boschke	141, 752	Aug. 12, 1873	311	102	4	168
Dredging-machine	W. A. Collins	145, 723	Dec. 23, 1873	628	206	4	672
Dredging-machine	H. Gonellaz	140, 821	July 15, 1873	429	146	4	62
Dredging-machine dipper-handle, Mode of fastening the rack of	R. R. Osgood	143, 247	Sept. 30, 1873	813	279	4	357
Dress-elevator	M. Fox	135, 703	Feb. 11, 1873	299	94	3	163
Dress-elevator	C. Tage	144, 576	Nov. 11, 1873	349	118	4	518
Dress-facing	W. H. Gallup	138, 326	Apr. 29, 1873	990	311	3	479
Dress, Ladies'	H. and E. S. Judson	139, 677	June 10, 1873	219	70	3	643

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Dressmakers' marking and cutting gage.....	M. Blauvelt.....	141,849	Aug. 19, 1873	408	133	4	186
Dress-pattern.....	E. P. Smith.....	137,967	Apr. 15, 1873	623	197	3	432
Dress-protector.....	A. Herrmann.....	140,415	July 1, 1873	63	22	4	13
Dress protector, Fabric for.....	J. McMullen.....	137,311	Apr. 1, 1873	29	9	3	359
Dress-shield.....	I. M. Post.....	140,538	July 1, 1873	167	56	4	22
Drill:							
<i>See</i> Brace-drill.							
Dental drill.							
Dentists' drill.							
Grain-drill.							
Ratchet-drill.							
Rock-drill.							
Seed-drill.							
Twist-drill.							
Well-drill.							
Well-boring drill.							
Drill and bit-stock.....	C. H. Amidon.....	140,451	July 1, 1873	89	31	4	15
Drill extractor.....	D. Kunkel.....	142,244	Aug. 26, 1873	774	255	4	225
Drill-gage.....	A. C. Trafton.....	139,487	June 3, 1873	41	13	3	612
Drill-jar.....	R. McMullen.....	137,378	Apr. 1, 1873	88	29	3	364
Drill or other bit-stock.....	H. B. Williams.....	138,973	May 13, 1873	449	141	3	545
Drill-rod coupling.....	R. A. Clark.....	141,694	Aug. 12, 1873	264	85	4	164
Drill-teeth.....	S. Black.....	136,408	Mar. 4, 1873	48	17	3	249
Drills, Machine for operating.....	J. W. Stockwell.....	137,504	Apr. 1, 1873	208	63	3	374
Drilling and pumping machinery, Standard jack-post for.	W. W. Eastman and W. H. H. Morris.	142,619	Sept. 9, 1873	271	89	4	276
Drilling-machine.....	P. Blaisdell.....	135,313	Jan. 28, 1873	762	{ 246 247 }	{ 3 3 }	109
Drilling-machine.....	H. Martin.....	138,570	May 6, 1873	94	30	3	505
Drilling-machine.....	W. H. Thorne.....	139,629	June 3, 1873	158	53	3	622
Drilling-machine.....	W. H. Thorne and I. N. D. Haven	142,966	Sept. 16, 1873	572	193	4	311
Drilling-machine.....	E. J. Worcester.....	135,613	Feb. 4, 1873	211	66	3	143
Drilling-machine cutter-head.....	E. Weicke.....	142,133	Aug. 26, 1873	682	224	4	217
Drilling-machine, Metal.....	J. C. Keller.....	140,925	July 15, 1873	524	175	4	70
Drilling or tapping instrument, Stock for.....	G. Bunch.....	139,042	May 20, 1873	520	164	3	563
Drinking-cups, Mustache-shield for.....	J. J. Greenough.....	144,614	Nov. 18, 1873	389	130	4	533
Drip-collecting device.....	W. A. Harris.....	136,597	Mar. 11, 1873	233	79	3	273
Drip-conductor.....	J. G. Widmann.....	139,641	June 3, 1873	172	57	3	623
Drop-light and hanger.....	G. F. Blaisse and W. F. Crites.....	144,309	Nov. 4, 1873	112	38	4	487
Drop-light and hanger.....	W. Staehlen.....	146,104	Dec. 30, 1873	984	318	4	711
Drop-light, Center.....	C. Deaves.....	145,632	Dec. 16, 1873	538	176	4	653
Drop-light, Center-slide.....	C. Deaves.....	139,123	May 20, 1873	600	188	3	569
Drop-light, Chandelier.....	R. Cornelius.....	140,347	July 1, 1873	13	4	4	9
Drop-light, Chandelier.....	R. Cornelius.....	140,348	July 1, 1873	14	4	4	9
Drop-light for chandeliers.....	C. E. Cornelius.....	145,053	Dec. 2, 1873	11	4	4	586
Drop-light for chandeliers.....	N. W. Williams.....	140,565	July 1, 1873	192	64	4	24
Dropper:							
<i>See</i> Harvester.							
Seed.							
Drum, Heating.....	J. E. Bartlett.....	141,621	Aug. 12, 1873	201	64	4	159
Drum, Heating.....	F. Proudfoot.....	145,237	Dec. 2, 1873	178	61	4	599
Drum, Heating.....	O. D. Spalding.....	144,573	Nov. 11, 1873	347	117	4	518
Drum, Heating.....	I. P. Tice.....	143,795	Oct. 21, 1873	385	128	4	430
Drum, Stove-pipe.....	A. W. Foote.....	140,999	July 22, 1873	608	205	4	86
Dryer:							
<i>See</i> Clothes-drier.							
Collar and cuff drier.							
Fruit-drier.							
Grain-drier.							
Lead-drier.							
Lumber-drier.							
Malt-drier.							
Offal-drier.							
Paper-drier.							
Poudrette-drier.							
Sugar-drier.							
Sugar and salt drier.							
Tan-drier.							
Tobacco-drier.							
Drier.....	J. Butterworth.....	138,475	May 6, 1873	9	3	3	498
Drier.....	W. A. Gibbs & A. Borwick.....	134,659	Jan. 7, 1873	150	{ 48 49 50 }	{ 3 3 3 }	18
Dry-goods rack.....	C. N. Cawallader.....	137,416	Apr. 1, 1873	121	40	3	367
Dry-goods stand.....	J. J. Bisel.....	138,226	Apr. 29, 1873	893	282	3	471
Drying cylinder, Steam.....	W. C. Collier.....	134,786	Jan. 14, 1873	273	89	3	42
Drying-frame for lace-curtains, &c.....	S. Short.....	145,912	Dec. 23, 1873	792	{ 259 260 }	{ 4 4 }	685
Drying frame, Wool.....	E. Duffee.....	142,561	Sept. 9, 1873	224	73	4	272
Drying kiln, Lumber.....	S. R. Kirby.....	143,912	Oct. 21, 1873	483	163	4	438
Dummy-engine.....	J. Comly.....	137,421	Apr. 1, 1873	126	41	3	367
Dummy-engine.....	M. H. Kollock.....	137,216	Mar. 25, 1873	789	260	3	338
Dummy or traction engine.....	A. A. Wilder.....	136,886	Mar. 18, 1873	485	161	3	302
Dumping apparatus.....	G. W. Reed.....	139,613	June 3, 1873	147	49	3	621
Dumping platform.....	J. Atkinson.....	135,683	Feb. 11, 1873	283	89	3	162
Dumping platform.....	W. W. Hinman.....	138,400	Apr. 29, 1873	1,049	330	3	484
Dumping platform.....	F. Peteler.....	142,724	Sept. 9, 1873	355	120	4	282
Dust-pan.....	O. C. Forsyth, jr.....	145,792	Dec. 23, 1873	686	225	4	677
Duster.....	G. M. Smith.....	135,376	Jan. 28, 1873	825	266	3	114
Duster, Feather.....	C. L. W. Baker.....	141,728	Nov. 18, 1873	483	163	4	540
Dyeing and washing fibrous materials, Apparatus for.	C. G. Sargent.....	134,935	Jan. 14, 1873	403	129	3	52
Dyeing fabrics.....	F. G. Graupner.....	139,573	June 3, 1873	111	.....	3	618
Dyeing felt hats and caps.....	J. T. Waring.....	142,064	Aug. 19, 1873	604		4	201
Dyeing madder-colors.....	F. A. Gatty.....	139,056	May 20, 1873	535		3	564

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Dyeing, Mordant for.....	R. O. Burgess and S. La Rhett.....	144,952	Nov. 25, 1873	680		4	568
Dyeing, Mordant for.....	G. A. Hagemann.....	143,449	Oct. 7, 1873	45		4	384
Dyeing with aniline black.....	J. Higgin.....	138,155	Apr. 22, 1873	803	.....	3	456
Dynamic machine.....	L. C. Errani and R. Anders.....	140,021	June 17, 1873	533	168	3	675
Dynamometer.....	G. W. Bigelow.....	144,945	Nov. 25, 1873	674	229	4	567
Ear-cover.....	M. Stone.....	139,831	June 10, 1873	365	113	3	654
Ear-muff.....	S. Goge.....	145,168	Dec. 2, 1873	120	39	4	595
Ear-protector.....	M. Isidor.....	138,894	May 13, 1873	389	122	3	539
Earth-boring machine.....	W. H. Bouser.....	139,761	June 10, 1873	304	94	3	649
Earth-boring machine.....	J. Burns.....	141,916	Aug. 19, 1873	474	155	4	190
Earth-boring machine.....	S. R. Owen.....	145,007	Nov. 25, 1873	727	245	4	572
Earth-boring machine.....	G. Wilson and G. H. Baisley.....	141,097	July 22, 1873	695	233	4	93
Earth-closet.....	C. C. Haskins.....	143,239	Sept. 30, 1873	806	277	4	356
Earth-closet.....	B. L. Kent.....	135,817	Feb. 11, 1873	402	{ 129 } 130	3	171
Earth-closet.....	B. L. Mack.....	137,013	Mar. 18, 1873	594	197	3	311
Earth-closet.....	I. S. and H. R. Russell.....	137,099	Mar. 25, 1873	680	226	3	329
Earth-closet.....	I. S. and H. R. Russell.....	145,756	Dec. 23, 1873	658	215	4	675
Earth-closet.....	C. A. Wakefield.....	140,099	June 17, 1873	605	191	3	681
Earth-closet.....	R. S. Williams.....	135,026	Jan. 21, 1873	498	{ 160 } 161	3	75
Earth-closet.....	J. L. Young.....	135,504	Feb. 4, 1873	101	32	3	135
Earth-closet.....	J. L. Young.....	146,119	Dec. 30, 1873	998	322	4	712
Earth-closet, Portable.....	A. Panyard.....	137,319	Apr. 1, 1873	37	12	3	360
Earthen pipe, Machine for making curved.....	R. Connable.....	143,670	Oct. 14, 1873	247	83	4	409
Earthen-ware pipe, Machine for making.....	J. Bingham.....	143,870	Oct. 21, 1873	451	{ 150 } 151	4	435
Earthen-ware pipes, Process of making curved.....	R. Connable.....	143,671	Oct. 14, 1873	248	.....	4	409
Earth-works, Machine for building.....	H. Morey.....	145,119	Dec. 2, 1873	74	23	4	591
Eaves-trough.....	P. F. Kiblinger.....	144,770	Nov. 18, 1873	520	176	4	543
Eaves-trough fastening.....	W. H. Hammond.....	142,016	Aug. 19, 1873	556	184	4	197
Eavestrough hanger.....	J. P. Abbott.....	135,056	Jan. 21, 1873	526	170	3	77
Eaves-trough hanger.....	T. W. Bailey.....	142,758	Sept. 17, 1873	400	135	4	296
Eaves-trough hanger.....	T. F. Palm.....	143,375	Sept. 30, 1873	929	315	4	366
Eaves-trough hanger.....	H. B. Todd.....	136,109	Feb. 18, 1873	661	216	3	205
Eaves-trough hanger.....	T. G. Williams.....	144,299	Nov. 4, 1873	106	35	4	487
Eaves-trough support.....	T. F. Morrison.....	146,014	Dec. 30, 1873	904	293	4	705
Eccentric.....	J. C. Buttefield.....	142,898	Sept. 16, 1873	512	174	4	306
Eccentric rod, Steam-engine.....	J. F. McCutchen.....	137,227	Mar. 25, 1873	798	263	3	338
Edge burnishing-machine, Shoe.....	N. C. Stow.....	141,399	July 29, 1873	998	324	4	124
Edge burnishing-tool, Welt.....	M. J. Ferren.....	137,903	Apr. 15, 1873	573	180	3	428
Edge-plane for trimming soles and welts of boots and shoes.....	B. J. Tayman.....	139,034	May 20, 1873	514	162	3	563
Edge-plane, Shoemakers'.....	F. F. Baumann.....	135,308	Jan. 28, 1873	758	245	3	109
Edge trimmer, Sole.....	W. Webster.....	146,036	Dec. 30, 1873	919	298	4	706
Edge trimming and burnishing machine for boots and shoes.....	C. J. Addy.....	142,756	Sept. 16, 1873	399	135	4	296
Edge trimming and burnishing machine, Jack-center for.....	T. M. Orr and A. R. Sears.....	144,560	Nov. 11, 1873	336	113	4	517
Edge-trimming soles, Implement for.....	A. P. Hazard.....	143,923	Oct. 21, 1873	408	136	4	431
Edging-machine.....	O. H. Gronberg and W. M. Ferry.....	139,142	May 20, 1873	619	193	3	571
Edging-machine.....	E. H. Stearns.....	143,264	Sept. 30, 1873	827	284	4	358
Egg and cake beater.....	J. W. Condon.....	140,891	July 15, 1873	486	164	4	67
Egg-beater.....	E. Hadley.....	138,647	May 6, 1873	157	51	3	510
Egg-beater.....	N. C. Miller.....	138,094	Apr. 22, 1873	756	240	3	452
Egg-beater.....	D. Munson.....	140,067	June 17, 1873	577	182	3	679
Egg-beater.....	J. F. Rote.....	144,507	Nov. 11, 1873	342	115	4	517
Egg-carrier.....	J. A. Beam.....	140,807	July 15, 1873	415	140	4	61
Egg-carrier.....	A. H. Bryant.....	139,540	June 3, 1873	81	28	3	615
Egg-carrier.....	G. M. Huston.....	140,579	July 8, 1873	217	73	4	37
Egg-carrier.....	G. M. Huston.....	140,580	July 8, 1873	218	73	4	37
Egg-carrier.....	W. A. Laverty.....	145,431	Dec. 9, 1873	352	118	4	626
Egg-carrier.....	E. L. Mueller.....	137,791	Apr. 15, 1873	476	149	3	420
Egg-carrier.....	C. J. Simmons.....	142,952	Sept. 16, 1873	560	190	4	310
Egg-carrier.....	S. H. Smith.....	139,431	May 27, 1873	890	287	3	600
Egg-carrier.....	F. M. Wade.....	145,137	Dec. 2, 1873	95	31	4	593
Egg-carrier.....	W. Weis.....	146,038	Dec. 30, 1873	920	298	4	706
Ejecting-apparatus for bottles.....	W. S. Ward.....	134,953	Jan. 14, 1873	419	134	3	54
Ejector.....	G. Hibberd.....	141,349	July 29, 1873	950	309	4	121
Ejector.....	W. B. Mack.....	139,799	June 10, 1873	337	105	3	652
Ejector, Air.....	J. Y. Smith.....	136,779	Mar. 11, 1873	383	127	3	285
Ejector, Sand.....	J. Thayer.....	137,507	Apr. 1, 1873	212	64	3	374
Ejector, Steam air.....	J. Y. Smith.....	136,780	Mar. 11, 1873	385	127	3	285
Ejector, Water.....	H. Coll.....	143,884	Oct. 21, 1873	463	155	4	436
Elastic bands, Clasp for.....	R. B. Staats.....	145,073	Dec. 2, 1873	30	10	4	588
Electrical-apparatus, Connecting-post for.....	T. Wishart.....	137,810	Apr. 15, 1873	493	154	3	421
Electrical-apparatus, Portable.....	F. H. Varley.....	138,455	Apr. 29, 1873	1,101	348	3	488
Electrical-apparatus, Screw-post for.....	S. D. Field.....	140,618	July 8, 1873	253	85	4	40
Electrical-regulator for transmitting-instrument.....	T. A. Edison.....	142,688	Sept. 9, 1873	327	109	4	280
Electro-magnet, Circuit for.....	J. E. Smith.....	137,730	Apr. 8, 1873	413	127	3	402
Electro-magnetic adjuster.....	T. A. Edison.....	134,868	Jan. 14, 1873	346	110	3	48
Electro-magnetic induction-coil.....	J. S. Camacho.....	138,316	Apr. 29, 1873	981	308	3	478
Electro-magnetic motor.....	S. C. Carter.....	138,855	May 13, 1873	358	111	3	537
Electrotyping, Etching-plates for.....	A. and H. T. Dawson.....	140,995	July 22, 1873	604	.....	4	86
Elevated way.....	H. W. Farley.....	145,638	Dec. 16, 1873	543	{ 178 } 179	4	653
Elevating-apparatus.....	M. A. Blakley and J. Cakill.....	135,511	Feb. 4, 1873	105	34	3	136
Elevating-machine.....	G. A. Dupuis.....	140,485	July 1, 1873	119	41	4	18
Elevator: See Building-elevator. Car-elevator. Dress-elevator. Grain-elevator. Hod-elevator. Hydraulic elevator.							

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Elevator—Continued.							
See Ice-elevator.							
Passenger and freight elevator.							
Portable elevator.							
Steam-elevator.							
Water-elevator.							
Elevator.....	J. S. Baldwin.....	138, 985	May 20, 1873	473	149	3	559
Elevator.....	J. M. Bean.....	136, 580	Mar. 11, 1873	220	73, 74	2	272
Elevator.....	J. H. Blohm.....	135, 398	Feb. 4, 1873	2	1	3	128
Elevator.....	E. Boyden.....	142, 555	Sept. 9, 1873	217	71	4	271
Elevator.....	C. W. Collyer.....	140, 473	July 1, 1873	111	37	4	17
Elevator.....	A. W. Cram.....	140, 017	June 17, 1873	528	167	3	674
Elevator.....	C. Du Bois.....	136, 978	Mar. 18, 1873	560	{ 186 187 }	3	309
Elevator.....	A. C. Herron.....	138, 154	Apr. 22, 1873	802	256	3	456
Elevator.....	G. W. Hubbard.....	143, 013	Sept. 23, 1873	616	209	4	325
Elevator.....	M. Mageean and G. W. Marks.....	138, 337	Apr. 29, 1873	997	314	3	480
Elevator.....	J. F. Marsh.....	137, 940	Apr. 15, 1873	600	189	3	430
Elevator.....	P. W. Mellen.....	137, 464	Apr. 1, 1873	165	52, 53	3	370
Elevator.....	W. A. Morrison.....	137, 789	Apr. 15, 1873	474	148	3	420
Elevator.....	W. R. Rightor.....	140, 076	June 17, 1873	583	185	3	679
Elevator.....	J. B. Sweetland.....	144, 161	Oct. 28, 1873	719	240	4	467
Elevator.....	G. C. Timpe.....	135, 454	Feb. 4, 1873	58	19	3	132
Elevator.....	O. Tufts.....	143, 944	Oct. 21, 1873	509	172	4	440
Elevator, Automatic safety-lock for.....	G. C. Timpe.....	135, 453	Feb. 4, 1873	57	18	3	132
Elevator-brake.....	F. P. Canfield.....	134, 640	Jan. 7, 1873	131	42	3	17
Elevator-guide.....	C. R. Otis.....	134, 698	Jan. 7, 1873	188	61	3	21
Elevator-hatchway protector.....	J. W. Meaker.....	139, 014	May 20, 1873	499	157	3	561
Elevator-indicator, Electric.....	J. H. Corey.....	137, 422	Apr. 1, 1873	127	41	3	367
Elevator, Safety-platform for.....	R. Dunbar.....	140, 190	June 24, 1873	703	221	3	697
Embalming human bodies, Fluid compound for.....	W. E. Chenowith.....	144, 602	Nov. 18, 1873	378	.....	4	532
Embossing-press.....	G. Clisbee.....	138, 130	Apr. 22, 1873	782	250	3	454
Embroidery-patterns, Apparatus for transferring.....	C. Bordas.....	143, 872	Oct. 21, 1873	452	151	4	435
Emery-grinding machine.....	H. S. Lucas.....	135, 482	Feb. 4, 1873	83	26	3	134
Emery-wheel.....	W. A. Johnston.....	140, 630	July 8, 1873	261	89	4	41
Enameled surfaces, Apparatus for printing and decorating.....	S. J. Hoggson.....	144, 979	Nov. 25, 1873	702	237	4	569
Engine:							
See Air-engine.							
Air and gas engine.							
Ammoniacal engine.							
Caloric-engine.							
Compound-engine.							
Compound steam-engine.							
Cylinder-engine.							
Dental-engine.							
Direct-acting steam-engine.							
Dummy-engine.							
Explosive engine.							
Fire-engine.							
Hoisting-engine.							
Hydraulic-engine.							
Link-motion engine.							
Motive-power engine.							
Motor-engine.							
Paper-pulp engine.							
Pumping-engine.							
Rag or paper engine.							
Reciprocating-engine.							
Reciprocating steam-engine.							
Rotary-engine.							
Rotary steam-engine.							
Steam-engine.							
Traction-engine.							
Vapor-engine.							
Engine.....	T. C. Robinson and C. W. Clift ..	136, 764	Mar. 11, 1873	371	123	3	284
Engine, Frame for horizontal.....	W. Wright.....	144, 818	Nov. 18, 1873	558	189	4	547
Engines, Combined quarter-connection and parallel motion for.....	A. J. L. Loretz.....	144, 852	Nov. 25, 1873	602	205	4	561
Engines, Mechanism for reversing.....	G. W. Bishop.....	144, 731	Nov. 18, 1873	485	164	4	541
Engraving and carving machine.....	T. W. Minter.....	135, 998	Feb. 18, 1873	562	186	3	197
Engraving bank-note plate, Method of.....	G. W. Casilear.....	138, 613	May 6, 1873	125	41	3	508
Engraving bank-note plate, Method of.....	G. W. Casilear.....	138, 614	May 6, 1873	126	42	3	508
Envelope.....	L. Giebrich.....	140, 496	July 1, 1873	130	45	4	19
Envelope.....	L. Giebrich.....	143, 136	Sept. 23, 1873	714	245	4	333
Envelope.....	S. Kuh.....	140, 204	June 24, 1873	714	225	3	698
Envelope.....	R. K. Kuhn and T. O. Atkinson.....	135, 819	Feb. 11, 1873	403	130	3	171
Envelope.....	C. Pink and M. Silverberg.....	139, 475	June 3, 1873	28	9	3	611
Envelope, Letter.....	J. D. McAnulty.....	142, 405	Sept. 2, 1873	76	25	4	248
Envelope-machine, Feed-box for.....	E. Allen.....	142, 606	Sept. 9, 1873	260	85	4	275
Envelope-opener.....	G. S. Hastings, jr.....	139, 312	May 27, 1873	786	250	3	592
Equalizer, Spring.....	H. Davis.....	143, 966	Oct. 28, 1873	551	183	4	453
Equalizer, Three-horse.....	W. Hastings, sr.....	140, 268	June 24, 1873	766	242	3	702
Equalizer, Three-horse.....	T. Hoadley.....	141, 875	Aug. 19, 1873	440	144	4	188
Eraser, Rubber.....	E. W. Frost.....	137, 299	Apr. 1, 1873	18	6	3	358
Eraser, Rubber.....	G. Stackpole.....	144, 364	Nov. 4, 1873	160	53	4	491
Evaporator:							
See Sugar-evaporator.							
Evaporating-pan.....	G. W. Storer.....	139, 625	June 3, 1873	156	52	3	621
Evaporating-pan.....	G. W. Storer.....	143, 939	Oct. 21, 1873	505	170	4	439
Evaporating-pan.....	G. W. Storer.....	144, 158	Oct. 28, 1873	714	238	4	467
Evaporating-pan.....	D. Watson.....	143, 649	Oct. 14, 1873	230	77	4	408
Evaporating-pan and plant for salt manufacture.....	G. W. Storer.....	144, 159	Oct. 28, 1873	716	{ 238 239 }	4	467
Evaporating-pan, Salt, sugar, &c.....	L. R. Cornell.....	135, 630	Feb. 11, 1873	233	73	3	158

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Evener, Three-horse	B. W. Sutherland	135, 861	Feb. 11, 1873	434	141	3	173
Evener, Two-horse	J. Sturgis	134, 946	Jan. 14, 1873	413	132	3	53
Excavator	J. M. Curless	138, 485	May 6, 1873	16	6	3	499
Excavator	J. T. Ham	135, 475	Feb. 4, 1873	75	24	3	133
Excavator	D. Judd	144, 679	Nov. 18, 1873	442	149	4	537
Excavator	A. P. Lomax	137, 011	Mar. 18, 1873	592	196	3	311
Excavator	B. A. Oliver	136, 936	Mar. 18, 1873	527	{ 174 } 175	3	306
Excavator	F. W. Shultz	135, 162	Jan. 21, 1873	607	198	3	84
Excavator	A. B. Smith	138, 539	May 6, 1873	63	21	3	503
Excavator, Carrier for	J. Williams	139, 446	May 27, 1873	901	290	3	601
Excelsior machine	W. H. Mayo	136, 529	Mar. 4, 1873	159	51	3	258
Exercising-apparatus	H. E. Eastman	134, 527	Jan. 7, 1873	23	8	3	9
Exercising-device	J. E. Austin	140, 237	June 24, 1873	740	233	3	700
Exercising-machine	S. M. Barnett	137, 876	Apr. 15, 1873	547	171	3	426
Exercising-machine	C. Kolle	135, 347	Jan. 28, 1873	798	258	3	111
Exercising-machine	R. Shaler	139, 924	June 17, 1873	456	142	3	668
Exercising-machine	L. D. Tice	137, 394	Apr. 1, 1873	104	33	3	365
Expansion-bolt	D. L. Bartlett	137, 338	Apr. 1, 1873	57	17	3	361
Expansive-bit	W. A. Clark	141, 324	July 29, 1873	920	301	4	119
Explosive compound	T. S. Beach	138, 841	May 13, 1873	345	.....	3	536
Explosive compound	C. Dittmar	145, 403	Dec. 9, 1873	327	.....	4	624
Explosive compound	A. Noble	141, 455	Aug. 5, 1873	40	.....	4	138
Explosive compound	J. H. Norrbin and J. Ohlsson	141, 585	Aug. 5, 1873	149	.....	4	147
Explosive compound	T. P. Shaffner	139, 738	June 10, 1873	284	.....	3	648
Explosive compound	T. Varney	139, 746	June 10, 1873	291	.....	3	648
Explosive compound, or giant-powder	E. Judson	139, 468	June 3, 1873	22	.....	3	610
Explosive compound to render it safe for blasting and other purposes, Treating	E. A. L. Roberts	139, 192	May 20, 1873	667	.....	3	575
Explosive-engine	J. M. Welbourn	142, 880	Sept. 16, 1873	496	169	4	305
Extension-table	A. F. Chubbuck	145, 049	Dec. 2, 1873	6	2	4	586
Extension-table	M. Coleman	136, 705	Mar. 11, 1873	321	106	3	280
Extension-table	E. Hamburjer	137, 917	Apr. 15, 1873	582	183	3	429
Extension-table	A. Herzog	136, 243	Feb. 25, 1873	787	254	3	227
Extension-table	M. Hofman	135, 274	Jan. 28, 1873	731	235	3	106
Extension-table	S. H. Martin	138, 571	May 6, 1873	94	30	3	505
Extension-table	A. Reed	137, 148	Mar. 25, 1873	722	240	3	333
Extension-table	C. Rieger	141, 954	Aug. 19, 1873	503	166	4	193
Extension-table	J. M. Sackman	142, 586	Sept. 9, 1873	244	80	4	273
Extension-table	W. Valentin	140, 392	July 1, 1873	48	16	4	12
Extension-table	S. E. Wales	137, 516	Apr. 1, 1873	217	66	3	374
Extension-table slide	G. Finkbeiner	135, 418	Feb. 4, 1873	24	7	3	129
Extension-table slide	J. King	144, 276	Nov. 4, 1873	89	29	4	485
Extension-table slide	G. W. Townsend	134, 711	Jan. 7, 1873	198	64	3	22
Extension-table slide	A. Zeh, G. P. Livingston, and P. V. W. Cullings	143, 554	Oct. 7, 1873	142	47	4	392
Extension-table top, Machine for making	R. G. Utley	136, 193	Feb. 25, 1873	749	241	3	224
Extractor:							
See Cork-extractor.							
Drill-extractor.							
Nail-extractor.							
Oil-tool extractor.							
Spike-extractor.							
Stump-extractor.							
Eye and lung protector	G. A. Crofutt	145, 337	Dec. 9, 1873	273	91	4	620
Eye, Apparatus for treating the	M. F. Potter	143, 928	Oct. 21, 1873	496	167	4	439
Eye-glass	A. D. Ansell	139, 353	May 27, 1873	814	260	3	595
Eye-glass	S. Greacen	140, 912	July 15, 1873	510	179	4	69
Eye-glass	M. Risley	142, 277	Aug. 26, 1873	800	264	4	227
Eye-glass, Suspension-hook for	W. S. Tappan	137, 735	Apr. 8, 1873	417	128	3	402
Eye-wash	R. C. Fisher	140, 768	July 15, 1873	380	.....	4	59
Eyelet	S. W. Young	138, 221	Apr. 22, 1873	865	274	3	461
Eyelet-making machine	H. L. Churchill and J. D. Robinson	143, 274	Sept. 30, 1873	834	287	4	359
Eyelet-setting machinery	A. B. Edmands	141, 211	July 29, 1873	815	267	4	110
Eyeletting-machine	A. Dawes	139, 048	May 20, 1873	524	{ 165 } 166	3	563
Fabric:							
See Elastic fabric.							
Felted fabric.							
Fur-coated fabric.							
Knit-fabric.							
Metallic fabric.							
Textile fabric.							
Water-proof furze fabric.							
Wire-fabric.							
Woven fabric.							
Fabric opening, smoothing, and guiding machine	W. Birch	137, 169	Mar. 25, 1873	741	246	3	334
Fabrics, Machine for disintegrating	M. Marshall	144, 685	Nov. 18, 1873	448	152	4	537
Fabrics unflammable, Rendering	D. Nicoll	142, 267	Aug. 26, 1873	791	.....	4	226
Fan	G. Brueck	137, 413	Apr. 1, 1873	119	39	3	367
Fan	C. C. Lusoy	145, 666	Dec. 16, 1873	567	186	4	655
Fan and parasol, Combined	C. St. John	144, 575	Nov. 11, 1873	348	117	4	518
Fan-attachment, Chair	B. L. Jordan	140, 047	June 17, 1873	557	176	3	677
Fan, Automatic	J. D. Bush	142, 081	Aug. 26, 1873	636	209	4	213
Fan, Automatic	W. C. Campbell	144, 505	Nov. 11, 1873	286	97	4	513
Fan, Automatic	C. H. Clark	135, 524	Feb. 4, 1873	118	37	3	137
Fan, Automatic	E. Duffer	138, 741	May 13, 1873	257	80	3	528
Fan, Automatic	W. Fay	137, 189	Mar. 25, 1873	763	252	3	336
Fan, Automatic	W. D. Hall	136, 044	Feb. 18, 1873	602	198	3	201
Fan, Automatic	A. P. Heidt	134, 543	Jan. 7, 1873	37	12	3	10
Fan, Automatic	F. W. Jones	137, 687	Apr. 8, 1873	372	115	3	398
Fan, Automatic	W. Lawrence and J. Sanders	134, 605	Jan. 7, 1873	101	33	3	15
Fan, Automatic	J. Lehner	138, 567	May 6, 1873	91	29	3	505
Fan, Automatic	H. T. McCormick	137, 785	Apr. 15, 1873	471	147	3	419
Fan, Automatic	P. H. Reichhardt and M. Schnapp	138, 345	Apr. 29, 1873	1,004	316	3	480

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Fan, Automatic.....	T. Welch.....	138,720	May 6, 1873	228	71	3	516
Fan for ventilating mines, Cross-paddle propeller.....	D. Rissinger.....	139,330	May 27, 1873	797	254	3	593
Fan, Rocking-chair.....	O. Brueck.....	139,112	May 20, 1873	587	184	3	568
Fan, Rocking-chair.....	A. Nissle and J. Schoberl.....	135,282	Jan. 28, 1873	739	238	3	107
Fan, Rotary.....	I. S. Eastman.....	134,740	Jan. 14, 1873	233	75	3	39
Fanning-mill.....	L. M. Boardman.....	142,197	Aug. 26, 1873	734	242	4	221
Fanning-mill.....	G. E. Clarke.....	134,643	Jan. 7, 1873	135	43, 44	3	17
Fanning-mill.....	L. H. Decker.....	137,185	Mar. 25, 1873	758	251	3	335
Fanning-mill.....	L. H. Decker.....	143,127	Sept. 23, 1873	707	243	4	332
Fanning-mill.....	E. M. Gilbert.....	143,506	Oct. 7, 1873	91	31, 32	4	388
Fanning-mill.....	J. W. Johnson.....	138,407	Apr. 29, 1873	1,054	332	3	484
Fare-box.....	H. Baranger.....	138,839	May 13, 1873	343	106	3	536
Fare-box.....	H. Baranger.....	140,669	July 8, 1873	292	98	4	43
Fare-box.....	T. L. Johnson.....	143,698	Oct. 14, 1873	278	92	4	411
Fare-box.....	S. H. Little.....	143,360	Sept. 30, 1873	917	311	4	365
Fare-box.....	Z. I. Pratt.....	136,865	Mar. 18, 1873	466	155	3	301
Fare-box.....	R. D. O. Smith.....	140,959	July 15, 1873	556	{ 186 187 }	4	73
Fare-box.....	J. F. Winchell.....	136,118	Feb. 18, 1873	667	218	3	205
Fare-box.....	J. F. Winchell.....	140,985	July 15, 1873	583	197	4	75
Farmer's boiler.....	P. Colvin.....	144,890	Nov. 25, 1873	631	214	4	563
Farmer's boiler.....	A. B. Nott.....	135,005	Jan. 21, 1873	480	154	3	74
Farm-gate.....	W. S. Brown.....	143,493	Oct. 7, 1873	82	28	4	387
Farm-gate.....	M. Burtless.....	140,612	July 8, 1873	249	84	4	40
Farm-gate.....	E. B. Decker.....	141,497	Aug. 5, 1873	79	25	4	141
Farm-gate.....	W. Lucas.....	145,994	Nov. 25, 1873	717	242	4	571
Farm-gate.....	H. W. Mullenex.....	138,918	May 13, 1873	406	128	3	541
Farm-gate.....	D. A. Neidig.....	146,015	Dec. 30, 1873	904	293	4	705
Farm-gate.....	J. C. Rohrer.....	144,291	Nov. 4, 1873	99	33	4	486
Farm-gate.....	T. Steers.....	140,960	July 15, 1873	558	187	4	73
Farm-gate.....	J. W. Westbrooks and A. J. Clemmons.....	139,219	May 20, 1873	688	216	3	577
Fats, Purifying and separating.....	A. Paraf.....	137,564	Apr. 8, 1873	265	.....	3	390
Fats, Treating animal.....	H. Mège.....	146,012	Dec. 30, 1873	902	.....	4	705
Fatty and coloring matter from waste wash-liquor, Recovering.....	J. Thom and J. Stenhouse.....	137,636	Apr. 8, 1873	325	.....	3	395
Faucet.....	A. Doll and C. Elling.....	144,516	Nov. 11, 1873	295	100	4	514
Faucet.....	P. Hille.....	144,097	Oct. 28, 1873	666	219	4	463
Faucet.....	A. D. and J. W. King.....	144,208	Nov. 4, 1873	35	10	4	481
Faucet.....	J. A. and T. McKenna.....	144,213	Nov. 4, 1873	39	12	4	481
Faucet.....	E. Scrannage, jr.....	138,700	May 6, 1873	206	65	3	514
Faucet.....	S. R. Thompson.....	144,422	Nov. 11, 1873	222	74	4	508
Faucet.....	H. Varwig.....	137,981	Apr. 15, 1873	635	200	3	433
Faucet.....	J. White.....	144,175	Oct. 28, 1873	733	244	4	468
Faucet-attachment.....	J. Chureb.....	143,062	Sept. 23, 1873	661	226	4	328
Faucet-attachment.....	E. L. Dunbar.....	141,040	July 22, 1873	644	217	4	89
Faucet-attachment, Self-closing.....	R. McConnell, W. Truesdell, and F. Mertsheimer.....	143,291	Sept. 30, 1873	847	292	4	360
Faucet, Beer.....	O. T. Earle.....	142,090	Aug. 26, 1873	646	212	4	214
Faucet, Beer and ale.....	J. Deasey.....	144,447	Nov. 11, 1873	239	80	4	509
Faucet, Bung.....	G. D. Lee.....	145,432	Dec. 9, 1873	353	118	4	626
Faucet, Compound.....	W. S. Bate.....	141,102	July 22, 1873	700	225	4	93
Faucet, Compression-basin.....	W. Gordon.....	135,541	Feb. 4, 1873	138	44	3	138
Faucet for soda-water apparatus, Draught.....	J. Patterson.....	137,620	Apr. 8, 1873	311	97	3	394
Faucet-holes, Bushing for.....	S. R. Thompson.....	141,473	Aug. 5, 1873	58	18	4	139
Faucet, Measuring.....	J. Schalk, jr.....	143,850	Oct. 21, 1873	436	145	4	434
Faucet, Self-closing.....	W. H. Bate.....	142,192	Aug. 26, 1873	729	240	4	221
Faucet, Self-closing.....	A. Brinckmann.....	140,183	June 24, 1873	699	219	3	696
Faucet, Self-closing.....	A. and E. Buchman.....	138,127	Apr. 22, 1873	779	249	3	454
Faucet, Self-closing.....	M. S. Clark.....	135,407	Feb. 4, 1873	14	4	3	129
Faucet, Self-closing.....	J. W. Trafton.....	143,042	Sept. 23, 1873	642	220	4	327
Faucet, Tool for inserting and withdrawing.....	K. A. Wattendorf.....	139,443	May 27, 1873	899	290	3	601
Faucet, Wash-stand.....	W. S. Bate.....	145,609	Dec. 16, 1873	517	169	4	651
Feather-renovator.....	S. A. Boyett.....	135,516	Feb. 4, 1873	109	35	3	136
Feather-renovator.....	R. B. Cooper.....	143,437	Oct. 7, 1873	36	13	4	383
Feather-renovator.....	L. S. Enos.....	143,130	Sept. 23, 1873	709	243	4	332
Feather-renovator.....	W. S. Groff.....	138,327	Apr. 29, 1873	991	312	3	479
Feather-renovator.....	E. N. McKimm and J. R. Gearhart.....	134,914	Jan. 14, 1873	386	123	3	51
Feather-renovator.....	J. B. Riley.....	137,240	Mar. 25, 1873	809	266	3	339
Feather-renovator.....	J. E. Schooler.....	145,759	Dec. 23, 1873	662	216	4	675
Feather-renovator.....	S. G. Thanhauser.....	139,211	May 20, 1873	682	214	3	576
Feathers, Made.....	A. E. Woolf.....	136,891	Mar. 18, 1873	490	162	3	303
Feed and delivery apron.....	P. R. Mansfield.....	137,224	Mar. 25, 1873	795	262	3	338
Feed-box, Folding.....	J. L. Edwards.....	134,869	Jan. 14, 1873	346	110	3	48
Feed-cutter.....	W. S. Bartle and J. Garloch.....	137,168	Mar. 25, 1873	740	246	3	334
Feed-water apparatus for steam-boiler.....	R. Berryman.....	135,757	Feb. 11, 1873	342	110	3	166
Feed-water heater.....	J. V. Beekman.....	142,983	Sept. 23, 1873	592	201	4	323
Feed-water heater.....	H. F. Boody and E. P. Merrill.....	134,634	Jan. 7, 1873	126	41	3	17
Feed-water heater.....	C. E. Frazier.....	139,665	June 10, 1873	207	67	3	642
Feed-water heater.....	J. H. Hale and A. C. Whitney.....	145,059	Dec. 2, 1873	17	7	4	587
Feed-water heater.....	G. W. Richardson.....	145,591	Dec. 16, 1873	503	165	4	650
Feed-water heater.....	W. Sambrook.....	146,024	Dec. 30, 1873	911	295	4	705
Feed-water heater.....	G. Wales.....	135,181	Jan. 21, 1873	623	203	3	85
Feed-water heater and condenser.....	R. Berryman.....	135,756	Feb. 11, 1873	341	109	3	166
Feed-water heater and condenser.....	T. E. McNeill and R. N. Pratt.....	139,908	June 17, 1873	443	138	3	667
Feed-water heater and purifier.....	S. J. Sadler and H. Volmar.....	141,517	Aug. 5, 1873	95	29	4	142
Feed-water heater, Locomotive.....	E. Moyal.....	135,438	Feb. 4, 1873	43	13	3	131
Feed-water heater, Steam-boiler.....	S. T. Taylor.....	138,957	May 13, 1873	437	137	3	544
Feed-water regulator.....	E. C. Fernald.....	137,541	Apr. 8, 1873	246	75	3	388
Feed-water regulator.....	J. B. Root.....	141,592	Aug. 5, 1873	155	50	4	148
Feeder, Portable stock.....	J. M. Spencer.....	138,351	Apr. 29, 1873	1,009	317	3	481
Feeder, Stock.....	U. Borel.....	145,984	Dec. 30, 1873	877	284	4	703
Feeder, Stock.....	C. M. Hall.....	138,801	May 13, 1873	308	95	3	533
Felly.....	W. L. Perry and A. J. Mathews.....	137,955	Apr. 15, 1873	613	193	3	431

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Felly-plate.....	C. D. Everett.....	138,624	May 6, 1873	137	45	3	509
Felly-plate.....	H. Sylvester.....	137,571	Apr. 8, 1873	273	84	3	390
Felt for weather-strips, packings, &c., Process of preparing.....	F. Siering.....	145,913	Dec. 23, 1873	793	.....	4	685
Felt-skirts, &c., Ornamenting.....	J. W. Blackham.....	142,554	Sept. 9, 1873	216	70	4	271
Felted fabric, Removing vegetable fiber from.....	J. T. Waring.....	142,063	Aug. 19, 1873	604	.....	4	201
Fence.....	G. Albro.....	141,532	Aug. 5, 1873	105	32	4	143
Fence.....	J. Gray.....	144,534	Nov. 11, 1873	312	105	4	515
Fence.....	W. F. King.....	143,161	Sept. 23, 1873	731	252	4	334
Fence, Adjustable picket.....	J. S. Anderson.....	134,624	Jan. 7, 1873	115	38	3	16
Fence, Farm.....	W. S. McKenzie.....	141,284	July 29, 1873	884	290	4	116
Fence, Flood.....	G. W. Duncan.....	145,493	Dec. 16, 1873	412	135	4	643
Fence, Flood.....	A. Orvis.....	139,418	May 27, 1873	880	232	3	600
Fence gate, Iron.....	C. T. Bush.....	138,071	Apr. 22, 1873	738	233	3	451
Fence, Iron.....	C. T. Bush.....	136,966	Mar. 18, 1873	551	183	3	308
Fence, Iron.....	B. G. Devoe.....	140,897	July 15, 1873	493	166	4	68
Fence, Iron.....	T. Rogers.....	145,902	Dec. 23, 1873	784	256	4	685
Fence, Iron.....	T. Rogers and B. G. Devoe.....	145,903	Dec. 23, 1873	785	257	4	685
Fence, Iron.....	J. B. Wickersham.....	135,188	Jan. 21, 1873	629	205	3	86
Fence, Iron post for wire.....	D. Kaufman.....	139,469	June 3, 1873	23	7	3	610
Fence-machine.....	J. H. Evans.....	145,996	Dec. 30, 1873	885	287	4	703
Fence, Picket.....	R. H. McGinty.....	143,632	Oct. 14, 1873	216	73	4	407
Fence, Picket.....	W. Most.....	138,573	May 6, 1873	96	30	3	505
Fence-pickets, Machine for cutting the heads of.....	A. Burnham.....	144,187	Nov. 4, 1873	13	3	4	479
Fence, Portable.....	G. F. Becher.....	141,750	Aug. 12, 1873	309	101	4	168
Fence, Portable.....	S. G. Burke.....	141,202	July 29, 1873	808	264	4	409
Fence, Portable.....	H. M. Dake.....	136,217	Feb. 25, 1873	766	247	3	225
Fence, Portable.....	J. E. Garlington.....	136,989	Mar. 18, 1873	571	190	3	309
Fence, Portable.....	L. Gates.....	138,747	May 13, 1873	261	81	3	528
Fence, Portable.....	O. Huffmar.....	140,273	June 24, 1873	771	243	3	703
Fence, Portable.....	R. Johnson.....	145,875	Dec. 23, 1873	757	247	4	683
Fence, Portable.....	A. Mosher.....	141,584	Aug. 5, 1873	149	48	4	147
Fence, Portable.....	H. W. and R. P. Nichols.....	143,372	Sept. 30, 1873	927	314	4	366
Fence, Portable.....	A. W. Olds.....	137,949	Apr. 15, 1873	607	191	3	431
Fence, Portable.....	W. W. Potts.....	142,865	Sept. 16, 1873	485	166	4	304
Fence, Portable.....	G. Robinson.....	144,228	Nov. 4, 1873	53	16	4	482
Fence, Portable.....	B. L. Taylor.....	144,641	Nov. 18, 1873	413	139	4	534
Fence, Portable.....	C. A. Thomas.....	144,165	Oct. 28, 1873	722	241	4	467
Fence, Portable.....	D. S. Watts.....	136,630	Mar. 11, 1873	262	88	3	275
Fence, Portable.....	T. L. Wiswell.....	140,752	July 8, 1873	364	123	4	49
Fence, Portable extension.....	A. W. Overholser.....	135,837	Feb. 11, 1873	417	135	3	172
Fence-post.....	J. M. Beebe.....	136,406	Mar. 4, 1873	47	17	3	249
Fence-post.....	H. O. Elmer.....	141,499	Aug. 5, 1873	80	25	4	141
Fence-post.....	J. Gibbs.....	142,910	Sept. 16, 1873	521	177	4	307
Fence-post.....	E. King.....	142,795	Sept. 16, 1873	429	145	4	299
Fence-post.....	H. S. Ross.....	145,528	Dec. 16, 1873	453	148	4	646
Fence-post.....	J. Scott.....	144,035	Oct. 28, 1873	613	203	4	458
Fence-post socket.....	G. W. and J. B. Durant.....	142,687	Sept. 9, 1873	326	109	4	280
Fence-post stub.....	G. Lakins.....	141,362	July 29, 1873	963	313	4	122
Fence, Rail.....	J. W. Mathews.....	137,701	Apr. 8, 1873	385	119	3	400
Fence-rails, Splicing.....	D. W. Knowles.....	144,113	Oct. 28, 1873	679	224	4	464
Fence, Self-locking rail.....	A. Bagley.....	134,967	Jan. 21, 1873	442	141	3	71
Fence-stretching apparatus, Wire.....	J. T. Mangham.....	136,528	Mar. 4, 1873	159	51	3	258
Fence, Wire.....	G. and L. N. Lakins.....	142,246	Aug. 26, 1873	776	255	4	225
Fence, Wire.....	J. A. Little.....	140,147	June 24, 1873	667	209	3	694
Fence, Wire.....	J. W. Rappleye.....	136,094	Feb. 18, 1873	647	212	3	204
Fence, Wire.....	H. M. Rose.....	138,763	May 13, 1873	275	85	3	530
Fence, Wood.....	W. Rley.....	137,723	Apr. 8, 1873	407	125	3	401
Fence, Wood.....	D. G. Temple.....	136,679	Mar. 11, 1873	303	100	3	278
Fence, Wood.....	R. F. Ward.....	143,478	Oct. 7, 1873	67	23	4	386
Fender:							
See Clod-fender.							
Fire-fender.							
Fender.....	G. F. Filley.....	144,269	Nov. 4, 1873	84	28	4	485
Fender and ash-sifter combined.....	W. C. Dobbins.....	142,214	Aug. 26, 1873	748	247	4	222
Fermentation of saccharine solutions, Process for delaying.....	J. A. Morrell.....	141,068	July 22, 1873	668	.....	4	91
Ferrule.....	C. E. Green and J. H. Bodwell.....	142,461	Sept. 2, 1873	124	40	4	252
Ferrule.....	S. E. Jeralds.....	145,950	Dec. 30, 1873	849	276	4	700
Ferry-boat for trains of cars.....	F. Cass.....	143,808	Oct. 21, 1873	399	132	4	431
Ferry-track platform, Railway.....	W. P. Halliday.....	135,545	Feb. 4, 1873	141	45	3	138
Fertilizer.....	A. F. Andrews.....	141,848	Aug. 19, 1873	407	.....	4	186
Fertilizer.....	J. McDougall.....	135,995	Feb. 18, 1873	560	.....	3	197
Fertilizer.....	J. W. Stubbs.....	136,277	Feb. 25, 1873	821	265	3	229
Fertilizer.....	J. Whitehill.....	138,458	Apr. 29, 1873	1,104	.....	3	488
Fertilizer.....	J. W. York.....	137,586	Apr. 8, 1873	285	88	3	391
Fertilizer-distributor.....	M. W. Faubion.....	142,454	Sept. 2, 1873	117	37	4	252
Fertilizer-distributor.....	D. F. Halliburton.....	138,398	Apr. 29, 1873	1,046	329	3	484
Fertilizer-distributor.....	J. Lytch.....	144,465	Nov. 11, 1873	254	85	4	510
Fertilizer distributing-machine.....	L. M. Reames.....	135,846	Feb. 11, 1873	424	138	3	172
Fertilizer from offal.....	J. J. Storer.....	143,310	Sept. 30, 1873	867	.....	4	361
Fertilizer, Preparing blood for.....	W. D. Craven.....	136,036	Feb. 18, 1873	595	.....	3	200
Fertilizer, &c., Process for treating sewage and ammoniacal waters for the production of.....	T. Christy, jr., and A. Bobrow-nicki.....	137,059	Mar. 25, 1873	642	.....	3	327
Fertilizer-spreader.....	J. W. Thornburg.....	137,736	Apr. 8, 1873	418	129	3	402
Fertilizers, Manufacture of.....	H. Stevens.....	144,877	Nov. 25, 1873	622	.....	4	562
Fertilizing-distributor.....	H. M. Sweeney.....	137,734	Apr. 8, 1873	416	128	3	402
Fertilizing soil.....	J. B. Wilson.....	143,213	Sept. 23, 1873	777	.....	4	338
Fiber-cleaning machine.....	S. T. Lamb.....	140,050	June 17, 1873	559	177	3	677
Fiber-disintegrator.....	A. Berthet and P. Laberie.....	145,613	Dec. 16, 1873	522	171	4	652
Fiber, Process of separating vegetable.....	W. E. Woodbridge.....	140,333	June 24, 1873	826	263	3	708
Fibrous material, Machine for working waste.....	J. K. Proctor.....	139,609	June 3, 1873	142	47, 48	3	620
Fifth-wheel, Carriage.....	H. A. Luttgens.....	134,907	Jan. 14, 1873	379	121	3	50
Fifth-wheel head, Die for manufacturing.....	F. Van Patten.....	141,682	Aug. 12, 1873	254	82	4	164
Fifth-wheel, Manufacture of carriage.....	D. Wilcox.....	137,274	Mar. 25, 1873	839	276	3	342

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Fifth-wheel of vehicle, Machine for milling	F. Van Patten	141, 683	Aug. 12, 1873	256	82, 83	4	164
Fifth-wheel, Vehicle	G. A. Brice	140, 676	July 8, 1873	299	100	4	44
Fifth-wheel, Vehicle	J. R. McGuire	145, 959	Dec. 30, 1873	855	278	4	701
File	H. Disston	142, 445	Sept. 2, 1873	111	36	4	251
File	J. B. Johnson	138, 256	Apr. 29, 1873	924	291	3	474
File and binder, Letter	E. Buell and J. W. Lilley	140, 610	July 8, 1873	246	83	4	40
File and binder, Paper	L. P. Keech	142, 546	Sept. 2, 1873	200	65	4	258
File, Bill and letter	A. J. Marshall	134, 554	Jan. 7, 1873	49	15	3	11
File, Bill and paper	W. H. Foye	145, 497	Dec. 16, 1873	416	137	4	643
File, Bill and paper	T. Orton	145, 230	Dec. 2, 1873	173	60	4	599
File, Bill and paper	G. T. Wolcott	140, 177	June 24, 1873	693	217	3	696
File-box, Paper	J. H. Bentley	139, 653	June 10, 1873	196	64	3	641
File-cutting machine	C. Vogel	135, 179	Jan. 21, 1873	621	{ 202 } { 203 }	{ 3 }	85
File-cutting machine	A. Weed	141, 300	July 29, 1873	898	295	4	117
File-handle	H. K. Austin	135, 684	Feb. 11, 1873	284	89	3	162
File-holder, Newspaper	W. Bright	134, 974	Jan. 21, 1873	449	144	3	71
File, Paper	G. W. Billow	134, 724	Jan. 14, 1873	223	71	3	38
File, Paper	M. Craft	144, 512	Nov. 11, 1873	292	99	4	514
File, Paper	P. W. Durham	142, 213	Aug. 26, 1873	747	246	4	222
File, Paper	R. Henning	138, 086	Apr. 22, 1873	750	237	3	452
File, Paper	C. D. Lindsey	137, 851	Apr. 15, 1873	528	165	3	424
File, Paper	C. Mason	139, 592	June 3, 1873	128	43	3	619
File, Paper	E. Motz	135, 144	Jan. 21, 1873	595	193	3	83
File, Paper	R. Rathbone	141, 170	July 22, 1873	765	251	4	98
File, Paper	J. F. Winter	140, 863	July 15, 1873	463	157	4	65
File, Prescription	A. D. Foster	138, 390	Apr. 29, 1873	1, 040	327	3	483
File, Tip for saw	H. Disston	142, 900	Sept. 16, 1873	514	175	4	306
Filing and binding papers, Apparatus for	P. MacVicar	134, 908	Jan. 14, 1873	380	121	3	50
Filing-case, Numerical	G. W. Bettsworth	144, 593	Nov. 18, 1873	371	125	4	531
Filing papers, Safety-hook for	L. H. Beckwith	138, 782	May 13, 1873	291	89	3	531
Filter	C. Andersen	143, 113	Sept. 23, 1873	698	239	4	331
Filter	J. R. Brown and W. A. Foskett	137, 653	Apr. 8, 1873	340	105	3	396
Filter	J. B. Ellis	142, 217	Aug. 26, 1873	749	247	4	222
Filter	J. M. Everts	140, 907	July 15, 1873	505	170	4	69
Filter	P. Huerne	135, 222	Jan. 28, 1873	684	220	3	103
Filter	G. S. Neff	143, 924	Oct. 21, 1873	492	166	4	438
Filter	C. C. Savery	139, 922	June 17, 1873	455	142	3	668
Filter, Cane-juice, oil, &c	A. K. Lee	137, 849	Apr. 15, 1873	526	164	3	424
Filter for oils, acids, &c	F. Jowitt	143, 768	Oct. 21, 1873	363	120	4	428
Filter, Turpentine	F. G. Richardson	142, 276	Aug. 26, 1873	799	264	4	227
Filter, Water	P. Ball and B. Fitts	138, 466	May 6, 1873	1	1	3	498
Filter, Water	W. M. Conger	136, 364	Mar. 4, 1873	10	4	3	246
Filter, Water	J. Pearson	142, 722	Sept. 9, 1873	354	{ 119 } { 120 }	{ 4 }	282
Filter, Water-cooler	C. Schneider	139, 085	May 20, 1873	565	177	3	567
Filter, Wine	C. W. Farciot	145, 288	Dec. 9, 1873	229	77	4	616
Filtering and rectifying spirits, Apparatus for	C. W. Ackermann	135, 057	Jan. 21, 1873	526	170	3	77
Finger-ring, Die for enlarging and sizing plain	G. Kremetz	140, 422	July 1, 1873	67	24	4	13
Finger-ring, Die for manufacturing plain	G. Kremetz	140, 423	July 1, 1873	68	24	4	14
Fire-alarm	W. A. Barnes	138, 467	May 6, 1873	3	1	3	498
Fire-alarm, and circuit therefor, Electrical and thermostatic	J. H. Guest	143, 691	Oct. 14, 1873	272	90	4	411
Fire-alarm, Automatic	H. L. Brown	139, 292	May 27, 1873	770	244	3	591
Fire-alarm, Automatic	C. H. Lehnis	145, 991	Nov. 25, 1873	714	241	4	571
Fire-alarm box, &c., Lock for	J. M. Fairchild	144, 079	Oct. 28, 1873	651	214	4	471
Fire-alarm signal-box	F. Latta	134, 552	Jan. 7, 1873	46	14	3	11
Fire-alarm signal-box	G. Wright, M. Y. Holley, and H. R. Miles	140, 106	June 17, 1873	611	192	3	681
Fire and water proof composition for ceilings, walls, and floors	L. A. Tartiere	138, 956	May 13, 1873	437	.....	3	544
Fire-arm, Breech-loading	J. Aston	138, 837	May 13, 1873	340	105	3	535
Fire-arm, Breech-loading	P. Bourdreaux	141, 198	July 29, 1873	801	262	4	109
Fire-arm, Breech-loading	H. A. Castle	144, 190	Nov. 4, 1873	16	5	4	479
Fire-arm, Breech-loading	M. J. Chamberlin	135, 405	Feb. 4, 1873	15	4	3	128
Fire-arm, Breech-loading	L. Conroy	145, 154	Dec. 2, 1873	106	35	4	594
Fire-arm, Breech-loading	J. Duval	145, 494	Dec. 16, 1873	412	136	4	643
Fire-arm, Breech-loading	G. Gundersen	145, 998	Dec. 30, 1873	887	288	4	703
Fire-arm, Breech-loading	J. S. Heath	138, 887	May 13, 1873	383	120	3	539
Fire-arm, Breech-loading	A. Henry	145, 944	Dec. 16, 1873	844	274	4	700
Fire-arm, Breech-loading	G. L. Holt and J. C. Marshall	138, 157	Apr. 22, 1873	805	256	3	456
Fire-arm, Breech-loading	H. H. Hopkins	143, 012	Sept. 23, 1873	615	209	4	325
Fire-arm, Breech-loading	H. Hoppenau	136, 998	Mar. 18, 1873	580	193	3	310
Fire-arm, Breech-loading	D. Hug	142, 396	Sept. 2, 1873	68	22	4	248
Fire-arm, Breech-loading	A. E. and P. J. Jarre	137, 927	Apr. 15, 1873	589	186	3	429
Fire-arm, Breech-loading	A. Marelli	139, 323	May 27, 1873	792	{ 252 } { 253 }	{ 3 }	593
Fire-arm, Breech-loading	E. Maynard	135, 928	Feb. 18, 1873	505	164	3	193
Fire-arm, Breech-loading	I. M. Milbank	136, 850	Mar. 18, 1873	456	151	3	300
Fire-arm, Breech-loading	T. Restel	139, 190	May 20, 1873	665	208	3	575
Fire-arm, Breech-loading	W. Richards	139, 422	May 27, 1873	883	284	3	600
Fire-arm, Breech-loading	J. Rider	141, 383	July 29, 1873	981	319	4	123
Fire-arm, Breech-loading	J. Rider	141, 384	July 29, 1873	983	319	4	123
Fire-arm, Breech-loading	W. Scott and W. J. Matthews	144, 870	Nov. 25, 1873	618	210	4	562
Fire-arm, Breech-loading	C. Sharp	137, 625	Apr. 8, 1873	315	98	3	394
Fire-arm, Breech-loading	H. N. Sherman	144, 872	Nov. 25, 1873	619	210	4	562
Fire-arm, Breech-loading	D. Smith	138, 207	Apr. 22, 1873	853	270	3	460
Fire-arm, Breech-loading	D. Smith and J. C. Marshall	141, 603	Aug. 5, 1873	167	53, 54	4	148
Fire-arm, Breech-loading	C. M. Spencer	135, 671	Feb. 11, 1873	269	85	3	161
Fire-arm, Breech-loading	J. P. Taylor	138, 711	May 6, 1873	217	68	3	515
Fire-arm, Breech-loading	G. Zeller	136, 894	Mar. 18, 1873	492	163	3	303
Fire-arm, Frame and stock for revolving	C. F. Galand	140, 028	June 17, 1873	538	170	3	676
Fire-arm, Hook-attachment to band of	I. Merrill	137, 786	Apr. 15, 1873	472	148	3	419
Fire-arm lock	D. Moore	145, 118	Dec. 2, 1873	73	23	4	591
Fire-arm, Magazine	A. Assmus	145, 478	Dec. 16, 1873	399	131	4	641

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Fire-arm, Magazine.....	J. H. Bean.....	141, 624	Aug. 12, 1873	204	64	4	160
Fire-arm, Magazine.....	A. Burgess.....	134, 589	Jan. 7, 1873	85	27	3	14
Fire-arm, Magazine.....	G. D. Luce.....	136, 660	Mar. 11, 1873	285	95	3	277
Fire-arm, Magazine.....	J. Rider.....	141, 590	Aug. 5, 1873	153	49	4	147
Fire-arm, Magazine.....	L. C. Rodier and F. G. Bates.....	138, 439	Apr. 29, 1873	1, 087	343	3	487
Fire-arm, Magazine.....	A. Swingle and F. A. Huntington	135, 947	Feb. 18, 1873	520	170	3	194
Fire-arm, Method of forming receiver for breech-block of.	E. G. W. Bartlett.....	145, 717	Dec. 23, 1873	622	204	4	672
Fire-arm, Powder and shot charger for.....	A. Hall.....	138, 751	May 13, 1873	265	82	3	529
Fire-arm, Revolving.....	B. K. Dorwart.....	142, 376	Sept. 2, 1873	49	17	4	246
Fire-arm, Revolving.....	C. Fochl.....	139, 461	June 3, 1873	16	5	3	610
Fire-arm, Revolving.....	S. Forehand and H. C. Wadsworth	143, 566	Oct. 14, 1873	159	53	4	402
Fire-arm, Revolving.....	J. M. Marlin.....	140, 516	July 1, 1873	149	51	4	20
Fire-arm, Revolving.....	W. H. Philip.....	142, 175	Aug. 26, 1873	715	236	4	220
Fire-arm, Revolving.....	G. W. Schofield.....	138, 047	Apr. 22, 1873	715	226	3	449
Fire-arm, Revolving.....	O. A. Smith.....	137, 968	Apr. 15, 1873	625	197	3	432
Fire-arm, Revolving.....	O. A. Smith.....	135, 377	Jan. 28, 1873	826	266	3	114
Fire-arm, Revolving.....	O. A. Smith.....	135, 378	Jan. 28, 1873	826	266	3	114
Fire-arm, Revolving.....	W. S. Smoot.....	143, 855	Oct. 21, 1873	440	146	4	434
Fire-arm, Revolving.....	D. B. Wesson.....	136, 348	Feb. 25, 1873	883	284	3	234
Fire-arm, Revolving.....	R. White.....	143, 394	Sept. 30, 1873	943	319	4	367
Fire-arm, Revolving.....	D. Williamson.....	137, 043	Mar. 18, 1873	621	205	3	313
Fire-arm, Revolving.....	D. Williamson.....	144, 814	Nov. 18, 1873	555	188	4	546
Fire-arm, Revolving.....	D. Williamson.....	144, 815	Nov. 18, 1873	556	189	4	546
Fire-arm, Swivel-loop for.....	E. Whitney, jr.....	137, 989	Apr. 15, 1873	642	202	3	434
Fire-bar and connecting bearing, Tubular.....	R. J. Ellis.....	145, 995	Dec. 30, 1873	885	287	4	703
Fire-box, Locomotive.....	C. H. Farley.....	134, 741	Jan. 14, 1873	234	75	3	39
Fire, Composition for kindling.....	J. C. Crumpton.....	138, 382	Apr. 29, 1873	1, 034	.....	3	483
Fire, Distributer for extinguishing.....	G. J. Orr.....	144, 696	Nov. 18, 1873	458	155	4	538
Fire-engine.....	J. A. Sinclair.....	144, 001	Oct. 28, 1873	586	194	4	456
Fire-engine, Floating.....	J. C. Lang.....	135, 922	Feb. 18, 1873	501	163	3	193
Fire-engine, Flue-blast for steam.....	J. Grabner.....	134, 796	Jan. 14, 1873	281	91	3	43
Fire-engine heater, Steam.....	W. F. Shaw.....	142, 589	Sept. 9, 1873	247	81	4	274
Fire-engine house, Horse-stall for steam.....	W. C. Davol, jr.....	144, 068	Oct. 28, 1873	643	211	4	461
Fire-engine, Steam.....	W. C. Davol, jr.....	143, 750	Oct. 21, 1873	347	116	4	427
Fire-engine, Supplementary heater for steam.....	R. Gilbert and J. P. Topham.....	138, 880	May 13, 1873	378	118	3	538
Fire-escape.....	L. E. Ainsworth.....	143, 112	Sept. 23, 1873	698	239	4	331
Fire-escape.....	P. W. Barnes.....	142, 141	Aug. 26, 1873	689	226	4	217
Fire-escape.....	L. M. Chipley.....	145, 844	Dec. 23, 1873	729	239	4	681
Fire-escape.....	C. Dieterich.....	143, 677	Oct. 14, 1873	258	85, 86	4	410
Fire-escape.....	W. Kegg.....	138, 410	Apr. 29, 1873	1, 058	333	3	485
Fire-escape.....	I. Merritt.....	139, 410	May 27, 1873	873	280	3	599
Fire-escape.....	C. C. Milton.....	138, 513	May 6, 1873	42	14, 15	3	501
Fire-escape.....	E. R. Morrison.....	135, 354	Jan. 28, 1873	803	259	3	112
Fire-escape.....	S. Murset and E. Zuberbuhler.....	144, 122	Oct. 28, 1873	686	227	4	464
Fire-escape.....	J. O'Brien.....	139, 416	May 27, 1873	878	281	3	599
Fire-escape.....	A. Pelham.....	141, 378	July 29, 1873	977	317	4	123
Fire-escape.....	H. A. Richards.....	137, 483	Apr. 1, 1873	184	58	3	372
Fire-escape.....	D. A. Scott and A. W. Hiltz.....	144, 361	Nov. 4, 1873	158	52	4	491
Fire-escape.....	G. H. Shaw.....	138, 051	Apr. 22, 1873	721	228	3	449
Fire-escape.....	J. A. Talpey.....	139, 484	June 3, 1873	37	12	3	612
Fire-escape.....	J. A. Talpey.....	141, 093	July 22, 1873	690	232	4	93
Fire-escape.....	F. A. L. Von Ehren.....	136, 883	Mar. 18, 1873	481	160	3	302
Fire-escape for safes.....	C. Morgan.....	144, 470	Nov. 11, 1873	258	87	4	511
Fire-extinguisher.....	G. Booth.....	144, 595	Nov. 18, 1873	373	126	4	531
Fire-extinguisher.....	O. F. Burton.....	135, 772	Feb. 11, 1873	354	114	3	167
Fire-extinguisher.....	W. L. Drake.....	145, 405	Dec. 9, 1873	330	110	4	624
Fire-extinguisher.....	W. L. Drake.....	145, 406	Dec. 9, 1873	331	111	4	624
Fire-extinguisher.....	C. A. Cox.....	137, 895	Apr. 15, 1873	563	176	3	427
Fire-extinguisher.....	F. Latta.....	142, 637	Sept. 9, 1873	283	93	4	277
Fire-extinguisher.....	C. Lippincott and J. Patterson.....	140, 512	July 1, 1873	145	50	4	20
Fire-extinguisher.....	H. S. Maxim.....	141, 062	July 22, 1873	661	223	4	90
Fire-extinguisher.....	H. L. McAvoy.....	139, 906	June 17, 1873	441	137	3	667
Fire-extinguisher.....	J. C. Meehan.....	137, 379	Apr. 1, 1873	89	29	3	364
Fire-extinguisher.....	W. K. Platt.....	137, 481	Apr. 1, 1873	182	57	3	372
Fire-extinguisher.....	J. H. Steiner.....	141, 825	Aug. 12, 1873	378	124	4	173
Fire-extinguisher.....	J. B. Stillson.....	139, 275	May 27, 1873	757	239	3	590
Fire-extinguisher.....	D. J. Tapley.....	141, 607	Aug. 5, 1873	172	55	4	149
Fire-extinguisher.....	J. S. Tibbets.....	140, 744	July 8, 1873	358	121	4	49
Fire-extinguisher.....	J. S. Tibbets.....	143, 203	Sept. 23, 1873	768	264 } 265 }	4	337
Fire-extinguisher, Anti-freezing.....	W. C. Bruson.....	143, 746	Oct. 21, 1873	345	115	4	426
Fire-extinguisher, Automatic.....	E. H. Ashcroft.....	144, 493	Nov. 11, 1873	278	94	4	512
Fire-extinguisher, Automatic.....	I. P. Tice.....	143, 794	Oct. 21, 1873	385	128	4	430
Fire-extinguisher, Boiler.....	J. D. Bresnihan.....	138, 068	Apr. 22, 1873	736	233	3	450
Fire-extinguisher, Chemical.....	A. E. Hughes.....	142, 340	Sept. 2, 1873	16	6	4	243
Fire-extinguisher for buildings.....	J. D. Sutter.....	144, 039	Oct. 28, 1873	617	204	4	459
Fire-extinguisher, Portable.....	I. C. Andrews.....	143, 605	Oct. 14, 1873	193	65	4	405
Fire-extinguishing by steam.....	J. A. Coleman.....	141, 034	July 22, 1873	637	215	4	88
Fire fender, grate, and andiron combined, Adjustable.....	W. N. Hall.....	138, 885	May 13, 1873	382	119	3	539
Fire indicator and alarm.....	J. Fawcett.....	144, 895	Nov. 25, 1873	634	216	4	563
Fire in high buildings, Extinguishing.....	A. Watson.....	145, 920	Dec. 23, 1873	798	262	4	686
Fire in oil-tanks, &c., Method of extinguishing.....	J. W. Stanton.....	145, 134	Dec. 2, 1873	92	29	4	592
Fire-kindler.....	R. Adams.....	135, 395	Feb. 4, 1873	1	1	3	128
Fire-kindler.....	A. Bushnell.....	138, 852	May 13, 1873	354	110	3	536
Fire-kindler.....	J. C. Crumpton.....	143, 066	Sept. 23, 1873	662	227	4	328
Fire-kindler.....	J. C. Crumpton.....	143, 277	Sept. 30, 1873	837	288	4	359
Fire-kindler.....	M. Gernsey.....	135, 706	Feb. 11, 1873	302	.....	3	163
Fire-kindler.....	J. Y. Marks.....	135, 280	Jan. 28, 1873	738	.....	3	107
Fire-kindler.....	C. A. Nisbett.....	136, 451	Mar. 4, 1873	84	29	3	252
Fire-kindler.....	E. P. Wheeler.....	143, 048	Sept. 23, 1873	648	222	4	327
Fire-kindlings.....	W. B. Tucker.....	135, 607	Feb. 4, 1873	204	.....	3	143
Fire-pipe for buildings, Stationary.....	H. Palmieri.....	136, 537	Mar. 4, 1873	168	54	3	259
Fire-place.....	J. L. Garlington.....	140, 621	July 8, 1873	255	86	4	40
Fire-place.....	W. Hoyland.....	144, 675	Nov. 18, 1873	438	148	4	537

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Fire-place	W. M. Kepler	142, 241	Aug. 26, 1873	772	254	4	224
Fire-place	W. Lossie	141, 937	Aug. 19, 1873	490	162	4	192
Fire-place	F. Proudfoot	139, 813	June 10, 1873	350	108	3	652
Fire-place	W. D. Robb	140, 543	July 1, 1873	171	58	4	22
Fire-place back	G. W. Cummings	138, 135	Apr. 22, 1873	787	251	3	455
Fire-place front	E. A. Jackson	144, 459	Nov. 11, 1873	250	84	4	510
Fire-place heater, Base-burning	W. Magill	135, 278	Jan. 28, 1873	736	237	3	107
Fire-place heater, Base-burning	J. S. Perry	134, 767	Jan. 14, 1873	255	83, 84	3	41
Fire-place lining	E. A. Jackson	144, 460	Nov. 11, 1873	250	84	4	510
Fire-place lining	A. J. Redway	135, 587	Feb. 4, 1873	185	57	3	142
Fire-plug	J. P. Gallagher	141, 131	July 22, 1873	726	241	4	95
Fire-plug and cistern, Combined	F. Latta and W. H. Hughes	137, 006	Mar. 18, 1873	586	195	3	311
Fire-proof building	E. Vacher	145, 700	Dec. 16, 1873	597	195	4	658
Fire-proof partition	C. F. Brand	144, 501	Nov. 11, 1873	284	96	4	513
Fire, Protecting buildings against	W. McCallister	144, 625	Nov. 18, 1873	398	133	4	533
Fire safety-line	C. A. Gregory	141, 269	July 29, 1873	874	286	4	115
Fire-shovel	F. M. Ketcham	143, 018	Sept. 23, 1873	621	211	4	325
Firkin	C. Alvord	141, 847	Aug. 19, 1873	407	133	4	186
Fish-bait, Compound for	S. A. Goodman, jr	135, 113	Jan. 21, 1873	567	.....	3	81
Fish-dressing machine	F. Kelsey and F. H. Hosmer	142, 918	Sept. 16, 1873	527	180	4	307
Fish-grappling spear	J. W. Knapp	144, 110	Oct. 28, 1873	677	224	4	464
Fish-hook	B. F. Allen	141, 910	Aug. 19, 1873	470	154	4	190
Fish, Preparing and preserving	W. Sharp	143, 386	Sept. 30, 1873	937	.....	4	367
Fish-spawn hatcher	M. G. Holton	136, 834	Mar. 18, 1873	443	147	3	299
Fish-trap	C. E. Ketcham	137, 930	Apr. 15, 1873	591	186	3	430
Fish-trap	S. Pavonarius and C. C. Michtle	141, 588	Aug. 5, 1873	152	49	4	147
Fishing-line	F. E. Forster	135, 900	Feb. 18, 1873	484	156	3	191
Fishing-reel	G. Mooney	134, 917	Jan. 14, 1873	389	124	3	51
Fishing-rod	J. B. McHarg	137, 015	Mar. 18, 1873	596	197	3	311
Fishing-rod	W. M. Smith	140, 656	July 8, 1873	282	95	4	42
Fishing-rod holder	F. Senieur	142, 126	Aug. 26, 1873	676	222	4	217
Fishing-stake	J. O. Campbell	144, 888	Nov. 25, 1873	630	214	4	563
Fishing-torch	S. Bartholomew	137, 877	Apr. 15, 1873	547	171	3	426
Flange-union	A. A. Dame	139, 877	June 17, 1873	414	129	3	665
Flash-light signal	W. Mitchell and J. J. Mayo	141, 010	July 22, 1873	618	209	4	87
Flask:							
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Flat-iron heater	J. F. Hall	144, 335	Nov. 4, 1873	134	45	4	489
Flat-iron heater	J. C. Wright and J. W. Sursa	140, 987	July 15, 1873	586	197	4	75
Flexible tubing, Elastic connection for	W. B. S. Taylor	144, 163	Oct. 28, 1873	721	240	4	467
Flies from rooms, Compound for expelling	J. Baquol	136, 203	Feb. 25, 1873	756	.....	3	224
Flock-cleaning machine	R. H. Dawson	140, 684	July 8, 1873	305	103	4	44
Floor	L. S. Wood	140, 864	July 15, 1873	464	157	4	65
Floor and ceiling, Fire-proof	W. T. Butler	141, 260	July 29, 1873	864	282	4	114
Floor and chimney connection, Fire-proof	W. Neracher	138, 096	Apr. 22, 1873	757	240	3	452
Floor and roof, Fire-proof	T. Hyatt	145, 181	Dec. 2, 1873	134	44	4	596
Floor and wall, Fire-proof	J. John	145, 211	Dec. 2, 1873	155	53	4	598
Floor, Basement	E. S. Vaughan	137, 740	Apr. 8, 1873	424	130	3	403
Floor-clamp	J. J. Foster	136, 428	Mar. 4, 1873	62	22	3	250
Floor-clamp	H. J. O. Reed	144, 140	Oct. 28, 1873	701	232	4	466
Floor-clamp	J. G. Rogers	139, 265	May 27, 1873	745	236	3	559
Floor-clamp	S. B. Wood, W. S., R. Y. H., and A. W. Terry	141, 528	Aug. 5, 1873	102	32	4	143
Floor, Fire-proof	N. Cheney	137, 345	Apr. 1, 1873	63	20	3	362
Floor, Fire-proof tile	W. L. Drake	140, 352	July 1, 1873	16	5	4	9
Floor-timber support	T. Voelckers	136, 947	Mar. 18, 1873	536	177	3	306
Flooring, Wood block for	F. Doubrava and J. Staib	139, 662	June 10, 1873	204	67	3	641
Flour and middlings bolt	B. F. Foreman and J. P. Speck	137, 430	Apr. 1, 1873	135	44	3	368
Flour and middlings purifier	E. N. Lacroix	142, 705	Sept. 9, 1873	340	114	4	241
Flour-bolt	D. T. Choat and H. Rich	142, 083	Aug. 26, 1873	638	209	4	213
Flour-bolt	W. Gosshorn	143, 821	Oct. 21, 1873	408	136	4	431
Flour-bolt	C. A. Harper	136, 508	Mar. 4, 1873	135	44	3	256
Flour-bolt	J. G. Kaufman	143, 910	Oct. 21, 1873	482	162	4	438
Flour-bolt	F. Render	135, 588	Feb. 4, 1873	185	58	3	142
Flour-bolt	G. T. and A. Smith	135, 496	Feb. 4, 1873	94	30	3	135
Flour for the manufacture of paste, Broom-corn seed	J. W. Tallmadge	146, 032	Dec. 30, 1873	916	.....	4	706
Flour, Machine for manufacturing	T. Carr	144, 830	Nov. 25, 1873	580	198	4	559
Flour, Machine for preparing	L. S. Chichester	134, 513	Jan. 7, 1873	11	4	3	8
Flour-mill	J. Dean	139, 553	June 3, 1873	93	32	3	616
Flour-packer	S. Taggart	146, 107	Dec. 30, 1873	986	318	4	711
Flour, Process of manufacturing middlings	G. T. Smith	137, 495	Apr. 1, 1873	199	.....	3	373
Flour, Process of preparing grain for manufacture of	O. F. Cook	145, 846	Dec. 23, 1873	732	240	4	681
Flower-maker's grass-cutting machine	T. and J. Millot	144, 916	Nov. 25, 1873	651	221	4	565
Flower-pot	M. B. Gould	135, 271	Jan. 28, 1873	729	233	3	106
Flower-pot bracket	M. D. Jones	134, 751	Jan. 14, 1873	242	79	3	40
Flower-pot, &c., Hook for hanging	I. A. Lovejoy	139, 254	May 27, 1873	734	232	3	588
Flower-stand	A. C. Dakin	135, 696	Feb. 11, 1873	293	92	3	163
Flowers, Artificial	C. A. Schaller	142, 353	Sept. 2, 1873	28	10	4	244
Flowers, Artificial stem for cut	J. B. Craig	144, 446	Nov. 11, 1873	239	80	4	509
Flowers, Process of bleaching, &c., dried natural	J. W. and M. L. Ware	134, 714	Jan. 7, 1873	200	.....	3	22
Fluid-meter	H. A. Desper	144, 747	Nov. 18, 1873	499	170	4	542
Fluid-meter	J. O. Johnson	138, 657	May 6, 1873	168	54	3	511
Fluid-motor, Rotary	H. Q. Hawley	140, 367	July 1, 1873	26	9	4	10
Flush-bolt for door	S. D. Arnold	139, 647	June 10, 1873	192	63	3	640
Fluting and plaiting machine	M. E. Wilson and A. J. Perry	140, 331	June 24, 1873	825	262	3	707
Fluting-machine	E. M. Deey	141, 923	Aug. 19, 1873	478	158	4	191
Fluting-machine	E. P. Holly	138, 650	May 6, 1873	160	52	3	510
Fluting-machine	D. R. Saunders	134, 936	Jan. 14, 1873	405	130	3	52
Fluting-machine	T. Stockmarr	137, 258	Mar. 25, 1873	826	271	3	340
Fly-catcher	L. Bartlett	135, 961	Feb. 18, 1873	531	175	3	195
Fly-protector	I. Daugherty	139, 552	June 3, 1873	92	31	3	616

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Fly-trap.....	S. B. Bacheller.....	134,833	Jan. 14, 1873	317	101	3	45
Fly-trap.....	H. L. Chapman.....	145,093	Dec. 2, 1873	51	16	4	589
Fly-trap.....	A. J. Davis.....	141,495	Aug. 5, 1873	78	24	4	141
Fly-trap.....	G. W. Eichholtz.....	145,791	Dec. 23, 1873	686	225	4	677
Fly-trap.....	G. W. Ernst and I. Lucas.....	138,797	May 13, 1873	305	94	3	532
Fly-trap.....	J. R. Johnson.....	141,931	Aug. 19, 1873	485	160	4	191
Fly-trap.....	T. Lane.....	145,507	Dec. 16, 1873	431	140	4	644
Fly-trap.....	R. P. and W. I. Miller.....	139,412	May 27, 1873	875	280	3	599
Fly-trap.....	C. Packard.....	144,860	Nov. 25, 1873	610	207 208	4	561
Fly-trap.....	C. S. Rouse.....	143,423	Oct. 7, 1873	25	10	4	383
Fly-trap.....	T. H. Whiting.....	140,176	June 24, 1873	692	217	3	696
Fly-wheel.....	H. Gerner.....	143,009	Sept. 23, 1873	613	208	4	324
Fog-alarm.....	C. and G. M. Stevens.....	141,396	July 29, 1873	994	323	4	124
Fog-signal.....	G. C. Pattison.....	145,008	Nov. 25, 1873	728	245	4	572
Fog-signal.....	W. A. Stewart.....	145,915	Dec. 23, 1873	794	260	4	685
Folding-case.....	J. C. Barker.....	135,878	Feb. 18, 1873	467	150	3	190
Folding-chair.....	A. C. Boyd.....	138,124	Apr. 22, 1873	778	248	3	454
Folding-chair.....	A. C. O. and N. Collignon.....	139,776	June 10, 1873	318	99	3	650
Folding-chair.....	K. Geisler.....	141,784	Aug. 12, 1873	343	113	4	171
Folding-chair.....	B. J. Harrison.....	141,271	July 29, 1873	875	286	4	115
Folding-chair.....	G. Hunzinger.....	138,892	May 13, 1873	387	121	3	539
Folding-chair.....	P. W. Nolan.....	141,456	Aug. 5, 1873	41	13	4	138
Folding-chair.....	do.....	141,457	Aug. 5, 1873	43	13	4	138
Folding-chair.....	D. N. Selleg.....	143,721	Oct. 14, 1873	304	100	4	413
Folding-chair, bed, and ottoman combined.....	E. Fauh.....	134,875	Jan. 14, 1873	351	112	3	48
Folding knife and fork.....	H. Schumacher.....	136,552	Mar. 4, 1873	181	58	3	260
Folding-screen.....	M. G. Lazarus.....	138,507	May 6, 1873	31	11	3	500
Folding-seat.....	J. H. Hall.....	143,979	Oct. 28, 1873	564	187	4	454
Folding-seat.....	W. W. Parker.....	139,021	May 20, 1873	505	159	3	562
Folding-table.....	J. F. Birchard.....	135,881	Feb. 18, 1873	470	151	3	190
Folding-table.....	S. V. Cornell.....	137,658	Apr. 8, 1873	346	107	3	397
Folding-table.....	F. W. Heublein.....	139,673	June 10, 1873	215	69	3	642
Folding-table, &c.....	H. Loth.....	138,904	May 13, 1873	395	124	3	540
Folding-table, &c.....	T. P. I. Magoun.....	136,167	Feb. 25, 1873	728	235	3	222
Folding-table.....	P. Munde.....	141,453	Aug. 5, 1873	39	12	4	138
Folding-table.....	C. H. Wheeler.....	142,306	Aug. 26, 1873	822	272	4	229
Food, Articles of.....	G. G. Campbell.....	135,204	Jan. 28, 1873	667	.....	3	101
Food, Articles of.....	L. S. and M. G. Johnson.....	136,165	Feb. 25, 1873	727	.....	3	222
Food, Artificial.....	H. C. Morris.....	136,447	Mar. 4, 1873	81	.....	3	252
Food, Compound.....	L. S. Chichester.....	136,302	Feb. 25, 1873	842	.....	3	231
Food, Compound.....	L. S. Chichester.....	136,303	Feb. 25, 1873	843	.....	3	231
Food, Compound.....	L. S. Chichester.....	136,304	Feb. 25, 1873	843	.....	3	231
Food for animals, Machine for cutting.....	R. Fauslau.....	135,326	Jan. 28, 1873	778	252	3	110
Food for infants from cereals.....	L. S. Chichester.....	144,508	Nov. 11, 1873	289	.....	4	513
Food from cereals, Articles of.....	L. S. Chichester.....	136,305	Feb. 25, 1873	844	.....	3	231
Food from wheat and process of preparing the same.....	E. H. Murray.....	139,600	June 3, 1873	136	.....	3	620
Food or sauce.....	F. A. Friscia.....	145,562	Dec. 16, 1873	480	.....	4	648
Foot-power apparatus.....	E. and H. Harding.....	141,928	Aug. 19, 1873	483	159	4	191
Foot-rest, Chair.....	T. A. Johnson.....	136,734	Mar. 11, 1873	346	115	3	282
Foot-warmer.....	J. B. Craig.....	144,445	Nov. 11, 1873	238	80	4	509
Foot-warmer.....	W. Heissenbuttel.....	144,095	Oct. 28, 1873	664	219	4	463
Forge, Blacksmiths'.....	W. T. Kellogg.....	144,986	Nov. 25, 1873	707	239	4	570
Forge-chimney, Flue-casing for.....	H. S. Wilcox.....	142,311	Aug. 26, 1873	826	274	4	229
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Fork and grain-rake.....	M. M. Wells.....	136,347	Feb. 25, 1873	883	284	3	234
Fountain:							
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Fountain and aquarium.....	J. Moore.....	143,456	Oct. 7, 1873	50	17	4	385
Fountain and pump combined.....	J. J. Sink.....	141,600	Aug. 5, 1873	164	53	4	148
Frame:							
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Hat-frame.							
Mattress-frame.							
Net-frame.							
Picture-frame.							
Pillow-spread frame.							
Quilting-frame.							
Saw-frame.							
Ship-frame.							
Slate-frame.							
Spinning-frame.							
Stove-door frame.							
Tent-frame.							
Traveling-bag frame.							
Vertical-engine frame.							
Window-frame.							
Frier and boiler, Combined.....	G. Smith.....	144,151	Oct. 28, 1873	708	235	4	466
Fringe or border, Knit.....	J. Phipps.....	139,810	June 10, 1873	347	108	3	652

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Flower, Die for forging.....	C. Konold.....	134, 983	Jan. 21, 1873	467	150	3	73
Fruit and berry basket.....	G. W. Swan and W. Finch.....	142, 299	Aug. 26, 1873	817	270	4	228
Fruit and lard press.....	W. H. Davis.....	142, 329	Sept. 2, 1873	7	3	4	242
Fruit-basket.....	S. D. Bedell.....	138, 605	May 6, 1873	118	39	3	507
Fruit-basket.....	W. D. Trissler.....	135, 737	Feb. 11, 1873	324	104	3	165
Fruit-basket.....	W. R. Wilcox.....	144, 376	Nov. 4, 1873	170	57	4	492
Fruit-basket cover.....	J. C. Ingham and C. Colby.....	141, 142	July 22, 1873	736	244	4	96
Fruit-box.....	E. P. Bothwell.....	134, 973	Jan. 21, 1873	449	143	3	71
Fruit-box.....	C. W. Weston.....	141, 842	Aug. 12, 1873	394	128	4	175
Fruit-can.....	M. Bray.....	144, 380	Nov. 11, 1873	184	63	4	505
Fruit-can.....	M. O'Donnor.....	142, 503	Sept. 2, 1873	163	53	4	255
Fruit-cans and other vessels, Apparatus for exhausting air from.	L. C. Cooley.....	140, 247	June 24, 1873	747	236	3	701
Fruit, Canning.....	J. B. Matthews.....	135, 927	Feb. 18, 1873	504	164	3	193
Fruit-crate.....	W. H. Clarkson.....	136, 968	Mar. 18, 1873	553	183	3	308
Fruit-crate.....	D. Crane.....	142, 148	Aug. 26, 1873	694	228	4	218
Fruit-crate.....	L. Selling.....	141, 389	July 29, 1873	989	321	4	124
Fruit-dryer.....	I. B. Cottrell.....	142, 147	Aug. 26, 1873	693	228	4	218
Fruit-dryer.....	A. Edwards.....	134, 528	Jan. 7, 1873	24	8	3	9
Fruit-dryer.....	G. R. Nebinger.....	138, 516	May 6, 1873	45	15	3	501
Fruit-dryer.....	J. L. Post.....	136, 670	Mar. 11, 1873	295	98	3	278
Fruit-dryer.....	J. Stevenson.....	137, 634	Apr. 8, 1873	322	101	3	395
Fruit-dryer.....	J. Williams.....	143, 949	Oct. 21, 1873	514	173	4	440
Fruit-fork.....	I. C. Draper.....	135, 975	Feb. 18, 1873	541	179	3	196
Fruit-gatherer.....	H. Kelsey.....	138, 565	May 6, 1873	89	28	3	505
Fruit-gatherer.....	J. Kisor.....	136, 072	Feb. 18, 1873	628	206	3	202
Fruit, Instrument to loosen dried.....	J. F. Schmeltzer and J. M. Roberts.....	144, 147	Oct. 28, 1873	705	234	4	466
Fruit-jar.....	T. B. Carroll.....	139, 115	May 20, 1873	593	186	3	569
Fruit-jar.....	H. C. Gaskill.....	136, 148	Feb. 25, 1873	714	230	3	221
Fruit-jar.....	E. G. Haller.....	136, 240	Feb. 25, 1873	784	254	3	227
Fruit-jar.....	E. G. Haller.....	140, 916	July 15, 1873	514	173	4	69
Fruit-jar.....	G. W. Hempell.....	136, 996	Mar. 18, 1873	578	192	3	310
Fruit-jar.....	H. Hering.....	136, 513	Mar. 4, 1873	143	46	3	257
Fruit-jar.....	H. Howson.....	135, 430	Feb. 4, 1873	35	10	3	130
Fruit-jar.....	A. T. Jones.....	139, 580	June 3, 1873	117	39	3	618
Fruit-jar.....	A. T. Jones.....	140, 508	July 1, 1873	142	49	4	20
Fruit-jar.....	J. L. Mason.....	137, 461	Apr. 1, 1873	163	52	3	370
Fruit-jar cover.....	J. L. Mason.....	137, 462	Apr. 1, 1873	163	52	3	370
Fruit-jar, Sealing.....	R. S. Manning.....	139, 170	May 20, 1873	647	202	3	573
Fruit-knife.....	G. W. Stevens.....	137, 501	Apr. 1, 1873	205	62	3	373
Fruit loosener, Dried.....	H. W. Holman.....	144, 542	Nov. 11, 1873	321	109	4	516
Fruit loosener, Dried.....	C. Ragan.....	137, 622	Apr. 8, 1873	313	97	3	394
Fruit-package.....	D. Snedeker.....	141, 605	Aug. 5, 1873	170	54	4	149
Fruit-packer.....	M. E. Lewis.....	140, 511	July 1, 1873	145	49	4	20
Fruit-picker.....	H. Mewes.....	139, 015	May 20, 1873	500	158	3	562
Fruit-press.....	O. Metcalf.....	137, 787	Apr. 15, 1873	472	148	3	420
Fuel and method of burning the same, Artificial.....	A. Berney.....	139, 288	May 27, 1873	766	.....	3	590
Fuel from coal-waste, Manufacture of.....	J. R. Hayes.....	136, 375	Mar. 4, 1873	23	.....	3	247
Fuel, Manufacture of.....	M. Rae.....	136, 263	Feb. 25, 1873	809	261	3	228
Fuel, Manufacture of artificial.....	D. Barker.....	140, 452	July 1, 1873	90	.....	4	16
Fulling-mill.....	R. Eickemeyer.....	144, 841	Nov. 25, 1873	590	{ 201 } { 202 }	4	560
Fumigator.....	A. R. Denlinger.....	144, 962	Nov. 25, 1873	688	232	4	568
Fumigator, Hospital, &c.....	T. J. Mayall.....	143, 583	Oct. 14, 1873	173	59	4	403
Funnel.....	W. B. Crowther.....	140, 350	July 1, 1873	15	5	4	9
Funnel.....	C. G. Way.....	135, 391	Jan. 28, 1873	836	270	3	115
Funnel-manufacture.....	L. R. Comstock.....	139, 873	June 17, 1873	411	128	3	665
Funnel-measuring.....	J. K. Cohic and D. H. Shartzler.....	139, 496	June 3, 1873	48	15	3	612
Fur-coated fabric, Manufacture of.....	H. Kellogg.....	143, 163	Sept. 23, 1873	732	252	4	334
Furnace:							
See Air-heating furnace.							
Blast-furnace.							
Boiler-furnace.							
Chimney-furnace.							
Coking-furnace.							
Cupola-furnace.							
Desulphurizing-furnace.							
Gas-furnace.							
Gas-retort furnace.							
Glass-furnace.							
Heating-furnace.							
Hot-air furnace.							
Locomotive-furnace.							
Metal-melting furnace.							
Metallurgic furnace.							
Metallurgic gas-furnace.							
Ore-reducing furnace.							
Ore roasting and treating furnace.							
Portable furnace.							
Puddling-furnace.							
Regenerator-furnace.							
Retort-furnace.							
Reverberatory-furnace.							
Shaft-furnace.							
Smelting-furnace.							
Smoke-burning furnace.							
Soldering-furnace.							
Summer-furnace.							
Fire-heating furnace.							
Zinc-furnace.							
Furnace.....	C. Schacher and L. Feret.....	145, 689	Dec. 16, 1873	586	192	4	657
Furnace and furnace-door.....	B. R. Hawley.....	136, 509	Mar. 4, 1873	136	44, 45	3	256
Furnace and steam-generator combined.....	O. W. Ketchum.....	139, 795	June 10, 1873	334	104	3	651
Furnace and steam-generator for heating, &c.....	B. R. Hawley.....	136, 510	Mar. 4, 1873	137	45	3	256
Furnace, Apparatus for feeding fuel to.....	C. P. Leavitt.....	141, 650	Aug. 12, 1873	226	71	4	161

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Furnace-block press	A. Hall	136,913	Mar. 18, 1873	507	168	3	304
Furnace, Process of using anthracite-coal dust as fuel in.	A. Berney	137,820	Apr. 15, 1873	501		3	422
Furnace-door	D. Auld, jr.	145,608	Dec. 16, 1873	517	169	4	651
Furnace-door	J. M. Clark	145,150	Dec. 2, 1873	103	34	4	593
Furnace linings, retorts, &c., Plastic compound for.	S. J. Payne	138,688	May 6, 1873	196	.....	3	513
Furnace, Straw-feeding attachment for	D. Morey	139,075	May 20, 1873	557	175	3	566
Furnaces, Bridge wall for	S. C. Sturtevant	144,421	Nov. 11, 1873	222	74	4	598
Furnaces, crucibles, &c., Composition for lining	A. E. Bates	145,326	Dec. 9, 1873	265	.....	4	619
Furnaces, Hot-air draft for	E. Boughton	144,249	Nov. 4, 1873	70	22	4	483
Furnaces, Straw-feeding attachment for	D. Morey	135,659	Feb. 11, 1873	256	81	3	160
Furniture leg	J. C. Orr and J. M. Baird	141,071	July 22, 1873	670	225	4	91
Furniture polish	C. A. Libby	138,262	Apr. 29, 1873	929	.....	3	474
Furniture, School	J. L. Riter	136,548	Mar. 4, 1873	178	57	3	259
Furniture spring	W. T. Doremus	137,600	Apr. 8, 1873	297	92	3	392
Furniture spring	W. T. Doremus	140,188	June 24, 1873	702	221	3	697
Furniture spring	W. T. Doremus	140,189	June 24, 1873	703	221	3	697
Furrowing machine	W. H. Rutledge	142,283	Aug. 26, 1873	304	266	4	227
Fuse, Electric	G. M. Mowbray	139,686	June 10, 1873	227	73	3	643
Fuse for shell, Combined percussion and time	E. Drake	137,186	Mar. 25, 1873	759	251	3	335
G.							
Gage:							
<i>See</i> Belt-lacing gage.							
Carpenters' gage.							
Collar-gage.							
Diamond-gage.							
Drill-gage.							
Harness-makers' gage.							
Joiners' gage.							
Machinists' gage.							
Micrometer-gage.							
Pressure-gage.							
Printing-press feed-gage.							
Railway-gage.							
Reading-gage.							
Ruling-gage.							
Saw-gage.							
Saw-tooth gage.							
Sliding-gage.							
Splitting-gage.							
Speed-gage.							
Steam-gage.							
Water-gage.							
Wire-gage.							
Gage	J. W. Butler	134,729	Jan. 14, 1873	226	72	3	39
Gaining-machine	J. Richards	143,531	Oct. 7, 1873	115	39	4	390
Gaiter	W. Love	139,321	May 27, 1873	791	252	3	592
Gaiter	W. E. Putnam	143,186	Sept. 23, 1873	751	259	4	336
Gaiter	M. M. Wheeler	144,173	Oct. 28, 1873	729	243	4	468
Galvanic battery	L. Bastet	138,602	May 6, 1873	116	38	3	507
Galvanic battery	T. A. Edison	142,999	Sept. 23, 1873	605	205	4	324
Galvanic battery	R. M. Lockwood	137,556	Apr. 8, 1873	259	80	3	389
Galvanic battery	A. L. Nolf	142,502	Sept. 2, 1873	163	53	4	255
Game apparatus	R. E. Bean	145,385	Dec. 9, 1873	308	104	4	623
Game apparatus	J. N. Sawkins	145,757	Dec. 23, 1873	660	215	4	675
Game apparatus	A. M. Smith	135,494	Feb. 4, 1873	92	29	3	135
Game apparatus	F. W. Smith	145,914	Dec. 23, 1873	793	260	4	685
Game apparatus	P. West and G. S. Lee	143,047	Sept. 23, 1873	647	221	4	327
Game apparatus	P. West and G. S. Lee	143,799	Oct. 21, 1873	328	129	4	430
Game apparatus	J. C. Wilhelm	145,706	Dec. 16, 1873	603	197	4	658
Game-board	J. C. Arms	136,200	Feb. 25, 1873	753	243	3	224
Game-board	A. F. R. Arndt	145,271	Dec. 9, 1873	214	73	4	615
Game-board	G. R. Elliott	136,048	Feb. 18, 1873	604	199	3	201
Game-board	F. P. Holmes	141,053	July 22, 1873	652	220	4	90
Game-board	G. Wentz	142,066	Aug. 19, 1873	606	199	4	201
Game register for cards	J. W. Sheppard	143,536	Oct. 7, 1873	119	40	4	390
Game-table	R. R. Crawford	144,659	Nov. 18, 1873	427	144	4	536
Game-table	L. A. Powers	136,092	Feb. 18, 1873	645	211	3	204
Game-table	S. S. Schindler	139,425	May 27, 1873	886	285	3	(0)
Game-table	F. Uebel	138,961	May 13, 1873	442	138	3	544
Game-table top	G. G. Thomson	137,113	Mar. 25, 1873	694	230	3	331
Gang-plank	F. G. Johnson	137,776	Apr. 15, 1873	465	145	3	419
Garbage-tub	S. B. Munson, jr.	140,527	July 1, 1873	159	54	4	21
Garden-implement	J. M. Lunguest	146,083	Dec. 30, 1873	960	310	4	710
Garden-weeding implement	W. Jones	143,354	Sept. 30, 1873	910	309	4	364
Garment, Under	O. P. Flynt	144,609	Nov. 18, 1873	383	129	4	532
Garments, Apparatus for ironing and pressing	R. B. Sanson	142,516	Sept. 2, 1873	174	57	4	256
Garter	H. A. House	136,599	Mar. 11, 1873	234	79	3	273
Garter and belt, Coil-spring	J. M. Ellis	145,160	Dec. 2, 1873	113	37	4	594
Gasalier extension	L. Hull	143,765	Oct. 21, 1873	360	119	4	428
Gasalier, Smoke-bell for	C. Deavs	141,634	Aug. 12, 1873	213	67	4	160
Gas and water main coupling	W. Kilburn	140,834	July 15, 1873	438	149	4	63
Gas and water pipe	E. H. Austin	136,952	Mar. 18, 1873	540	178	3	307
Gas and water pipe coupling	J. Holmes	143,348	Sept. 30, 1873	905	308	4	364
Gas apparatus	J. W. Brown and H. B. West	138,377	Apr. 29, 1873	1,029	324	3	482
Gas apparatus	H. H. Wainwright	135,455	Feb. 4, 1873	59	19	3	132
Gas, Apparatus for carbureting and regulating the pressure of.	T. G. Springer	142,525	Sept. 2, 1873	181	59, 60	4	255
Gas, Apparatus for manufacturing	W. H. Spencer	141,090	July 22, 1873	688	231	4	92
Gas, Apparatus for manufacture of coal	E. Jones	135,647	Feb. 11, 1873	248	78	3	159
Gas, Apparatus for manufacturing hydrogen	W. L. Imlay	144,543	Nov. 11, 1873	322	109	4	516
Gas, Apparatus for manufacturing illuminating	J. G. and W. Müller	145,810	Dec. 23, 1873	701	230	4	678
Gas apparatus for railway-car	J. B. Olney	141,886	Aug. 19, 1873	449	146	4	189
Gas apparatus, Hydro-carbon	L. Maring and E. Mertz	135,568	Feb. 4, 1873	161	52	3	140

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Gas as a motive-power, Utilizing	O. Bolton, jr.	143, 954	Oct. 28, 1873	542	180	4	453
Gas-bracket	J. F. Goldthwait	143, 138	Sept. 23, 1873	715	245	4	333
Gas, Composition for purifying illuminating	S. B. Parham	144, 284	Nov. 4, 1873	94	.....	4	486
Gases, Apparatus for the manufacture of	W. Maynard	136, 081	Feb. 18, 1873	635	208	3	203
Gas-exhausting and washing apparatus	C. H. Brown and J. J. Thomas	137, 174	Mar. 25, 1873	747	248	3	335
Gas-extinguisher	D. M. Reynolds	145, 243	Dec. 2, 1873	182	63	4	600
Gas-fittings, Device for boring and turning	M. Walty	138, 456	Apr. 29, 1873	1, 102	348	3	488
Gas-fixture	G. G. Sheldon	138, 766	May 13, 1873	277	86	3	530
Gas for illuminating, heating, &c., Manufacture of	R. M. Whipple and J. G. Blunt	137, 521	Apr. 1, 1873	221	68	3	375
Gas from hydro-carbons, Apparatus for the manufacture of	J. Rigby	135, 666	Feb. 11, 1873	264	83	3	160
Gas from oil, Apparatus for making	S. H. Goldthorp	140, 911	July 15, 1873	509	171	4	69
Gas from petroleum, &c., Manufacture of illuminating	R. H. Smith	141, 732	Aug. 12, 1873	292	96	4	167
Gas-furnace	L. Stevens	141, 179	July 22, 1873	776	{ 253 } 254	4	99
Gas-furnace	L. Stevens	141, 180	July 22, 1873	777	254	4	99
Gas, &c., Furnace for manufacture of	F. Carroll	144, 506	Nov. 11, 1873	287	97	4	513
Gas furnace, Metallurgic	H. Frank	135, 639	Feb. 11, 1873	241	76	3	158
Gas furnace, Metallurgic	J. Thomas	139, 834	June 10, 1873	367	114	3	654
Gas generator	D. H. Ireland	138, 160	Apr. 22, 1873	808	257	3	456
Gas generator	J. S. Wood	138, 778	May 13, 1873	289	89	3	531
Gas generator, Carbonic acid	J. W. Stanton	137, 330	Apr. 1, 1873	50	15	3	361
Gas generator, Carbonic acid	F. W. Wiesebrock	144, 719	Nov. 18, 1873	475	161	4	540
Gas generator, Carbonic acid	O. Zwietsch	145, 774	Dec. 23, 1873	673	220	4	676
Gas governor and by-pass	P. Munzinger	139, 514	June 3, 1873	61	20, 21	3	613
Gas-heater	C. H. Prentiss	136, 383	Mar. 4, 1873	29	10	3	248
Gas-illuminator	J. B. Van Patten	136, 565	Mar. 4, 1873	192	63	3	261
Gas in furnaces, Method of burning	J. C. Tiffany	145, 257	Dec. 2, 1873	196	68	4	601
Gas-light and pressure-indicator	W. W. Goodwin	138, 016	Apr. 22, 1873	683	216	3	446
Gas-lighter	E. D. McCracken	136, 084	Feb. 18, 1873	637	209	3	203
Gas-lighting apparatus	A. Potter	140, 591	July 8, 1873	228	76	4	38
Gas-lighting apparatus, Automatic	F. Korwan	136, 739	Mar. 11, 1873	350	116	3	282
Gas-lighting apparatus, Electrical	J. Vansant	139, 692	June 10, 1873	233	75	3	644
Gas-lighting by electricity	W. A. Pitt	139, 811	June 10, 1873	348	108	3	652
Gas-lighting, Electrical	C. G. Mueller and H. Meier	139, 599	June 3, 1873	134	44	3	620
Gas-lighting torch	E. P. Gleason	140, 191	June 24, 1873	704	222	3	697
Gas-lime &c., Obtaining bisulphide of carbon from	J. Kircher	138, 504	May 6, 1873	29	.....	3	500
Gas-lime, Obtaining sulphur, sulphuric acid, and sulphurets of sodium and potassium from	J. Kircher	137, 692	Apr. 8, 1873	377	.....	3	399
Gas-machine	T. B. Fogarty	135, 980	Feb. 18, 1873	546	181	3	196
Gas-machine	H. Tilden	138, 715	May 6, 1873	222	69	3	515
Gas-machine, Air	P. Werni	141, 973	Aug. 19, 1873	517	171	4	194
Gas machine, Portable	B. Sloper	143, 426	Oct. 7, 1873	28	10	4	383
Gas, Manufacture of	R. H. Patterson	137, 713	Apr. 8, 1873	397	.....	3	401
Gas, Manufacture of	F. A. Sabbaton	139, 083	May 20, 1873	564	177	3	566
Gas, Manufacture of	H. Skoines	145, 021	Nov. 25, 1873	739	{ 249 } 250	4	572
Gas, Manufacture of illuminating	W. Elmer	141, 500	Aug. 5, 1873	81	.....	4	141
Gas, Manufacture of illuminating	C. Gearing	140, 264	June 24, 1873	762	{ 240 } 241	3	702
Gas, Manufacture of illuminating	E. R. Hopkins	145, 655	Dec. 16, 1873	556	183	4	654
Gas, Manufacture of illuminating	T. N. Miller	139, 910	June 17, 1873	445	.....	3	667
Gas, Manufacture of illuminating	A. P. Southwick	142, 289	Aug. 26, 1873	808	267	4	227
Gas, Manufacture of vapor	C. L. Cohen	141, 119	July 22, 1873	713	.....	4	95
Gas, Manufacture of water	E. J. Jerzmanowski	145, 350	Dec. 9, 1873	283	94	4	620
Gas, Manufacturing illuminating	A. W. Wilkinson	140, 104	June 17, 1873	609	.....	3	681
Gas, Manufacturing illuminating	W. C. Wren	137, 750	Apr. 8, 1873	435	134	3	403
Gas-meter	D. DeCastro and R. Burton	141, 263	July 29, 1873	869	284	4	114
Gas-meter	W. A. Telling and S. Johnson	143, 390	Sept. 30, 1873	940	318	4	367
Gas-meter, Dry	A. Harris	145, 650	Dec. 16, 1873	553	182	4	654
Gas-meter, Paper dry	A. Schüssler and C. F. Dieterich	144, 868	Nov. 25, 1873	616	.....	4	562
Gas-meter, Method of purifying carbonic acid	A. P. Meylert	135, 001	Jan. 21, 1873	476	.....	3	73
Gasometer or gas-holder	J. C. Tiffany	135, 172	Jan. 21, 1873	615	201	3	85
Gas-pipe and fixture	J. and T. D. Richardson	140, 165	June 24, 1873	681	214	3	695
Gas-pipe, Apparatus for removing obstructions from	G. Goldsmith and J. Dilkes	144, 843	Nov. 25, 1873	594	202	4	560
Gas-pipe nipples, Device for holding	L. W. Stockwell	141, 244	July 29, 1873	849	277	4	113
Gas, Process and composition for manufacture of illuminating	W. H. Sterling	142, 959	Sept. 16, 1873	565	.....	4	310
Gas, Process of purifying carbonic-acid	A. P. Maylert	137, 615	Apr. 8, 1873	308	.....	3	393
Gas, Purification of illuminating	W. H. St. John	142, 358	Sept. 2, 1873	32	12	4	245
Gas-purifier	J. T. Goodfellow and F. A. Sab- baton.	140, 034	June 17, 1873	543	{ 172 } 173	3	676
Gas-purifier and regulator	J. A. Enos	139, 131	May 20, 1873	607	190	3	570
Gas-purifier tray or grating	J. L. Cheeseman	139, 702	June 10, 1873	249	79	3	645
Gas-regulator	C. H. Edwards	142, 155	Aug. 26, 1873	700	231	4	218
Gas-regulator	P. Keller	137, 454	Apr. 1, 1873	155	50	3	369
Gas-regulator or vulcanizer	G. M. Hopkins	139, 579	June 3, 1873	116	39	3	618
Gas-retort	D. Davison	143, 675	Oct. 14, 1873	253	85	4	409
Gas-retort	G. A. McIlhenney	145, 672	Dec. 16, 1873	572	188	4	656
Gas-retort	J. D. Patton	139, 605	June 3, 1873	140	46	3	620
Gas-retort	J. C. Tiffany	145, 256	Dec. 2, 1873	195	67	4	601
Gas-retort	J. Wotherspoon and W. Foulis	145, 267	Dec. 2, 1873	206	70	4	601
Gas-retort, Apparatus for charging	A. F. Havens	140, 624	July 8, 1873	257	87	4	40
Gas-retort, Apparatus for charging	T. F. Rowland	137, 485	Apr. 1, 1873	187	58	3	372
Gas-retort, Apparatus for charging	J. Somerville and J. Robinson	143, 039	Sept. 23, 1873	638	{ 218 } 219	4	326
Gas-retort, Apparatus for charging and drawing	W. Foulis	144, 526	Nov. 11, 1873	304	{ 102 } 103	4	514
Gas-retort, Apparatus for raking	T. F. Rowland	137, 486	Apr. 1, 1873	189	59	3	372
Gas-retort charger	T. F. Rowland	137, 487	Apr. 1, 1873	192	59	3	373
Gas-retort, Closing	G. A. McIlhenney	137, 704	Apr. 8, 1873	388	120	3	400
Gas-retort, Closing	G. A. McIlhenney	142, 253	Aug. 26, 1873	780	257	4	225
Gas-retort, Compound for	G. F. Kreischer & L. A. Tartiere	137, 934	Apr. 15, 1873	595	.....	3	430
Gas-retort, Compound for cleaning	W. L. Pitkin and C. J. Gleason	140, 590	July 8, 1873	227		4	38
Gas-retort furnace	W. C. Wren	137, 811	Apr. 15, 1873	493	154	3	421

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Gas-retort mouth-piece	P. Munzinger	144, 857	Nov. 25, 1873	608	207	4	561
Gas-retort mouth-piece	T. F. Rowland	143, 998	Oct. 28, 1873	583	194	4	456
Gas-seal, &c.	R. M. Caffall	144, 504	Nov. 11, 1873	285	97	4	513
Gas, Treating offal and manufacturing	J. Turner	140, 391	July 1, 1873	47	16	4	12
Gas, water, &c., Machine for making laminated pipe for.	J. S. Patric	138, 814	May 13, 1873	320	99	3	534
Gas-works, By-pass for	P. Munzinger	144, 408	Nov. 11, 1873	207	69	4	507
Gas-works, Hydraulic main for	P. T. Burtis	137, 655	Apr. 8, 1873	342	106	3	396
Gas-works, Hydraulic main of	W. Farmer	134, 874	Jan. 14, 1873	350	111	3	48
Gate:							
<i>See</i> Automatic gate.							
Change-gate.							
Farm-gate.							
Fence-gate.							
Hanging-gate.							
Nursery-gate.							
Railway-gate.							
Swinging-gate.							
Tilting-gate.							
Wagon-end gate.							
Water-wheel gate.							
Gate	J. Blinn	135, 463	Feb. 4, 1873	67	21	3	133
Gate	E. Hickman	145, 104	Dec. 2, 1873	60	19	4	590
Gate	M. Loomis	145, 434	Dec. 9, 1873	354	118	4	626
Gate	G. W. and G. S. Mackey	144, 780	Nov. 18, 1873	527	179	4	544
Gate, Adjustably-hinged	E. M. George	136, 149	Feb. 25, 1873	714	231	3	221
Gate-fastener	J. H. Nichols	145, 362	Dec. 9, 1873	292	98	4	621
Gates, Hanging	E. Secor	142, 522	Sept. 2, 1873	179	59	4	256
Gear-cutting machine	J. W. Foster	136, 429	Mar. 4, 1873	63	22	3	250
Gear-cutting machine	J. J. Greenough	135, 218	Jan. 28, 1873	680	219	3	102
Gear, Friction	F. Simmons	138, 444	Apr. 29, 1873	1,092	345	3	487
Gear, Friction-driving	W. W. Tunis	134, 825	Jan. 14, 1873	311	99	3	45
Gearing	E. G. Chormann	134, 642	Jan. 7, 1873	134	43	3	17
Gearing	F. Emmerich	140, 690	July 8, 1873	309	105	4	45
Gearing	J. J. Greenough	145, 499	Dec. 16, 1873	417	137	4	643
Gearing, Device for increasing the friction of helical	G. Lindsay	141, 149	July 22, 1873	743	245	4	97
Gear or universal joint, Spherical	T. Weaver	145, 075	Dec. 2, 1873	31	10	4	588
Gear, Trotting	H. Schmalhausen	142, 871	Sept. 16, 1873	491	167	4	304
Generator:							
<i>See</i> Acid-generator.							
Gas-generator.							
Ozone-generator.							
Steam-generator.							
Steam and vapor generator.							
Vapor-generator.							
Gimlet-handle	C. L. Griswold	143, 142	Sept. 23, 1873	717	246	4	333
Gimlet-handle	H. S. Shepardson	141, 671	Aug. 12, 1873	245	78	4	163
Gin-saw, Machine for sharpening	J. M. Bailey	135, 256	Jan. 28, 1873	718	230	3	105
Girder, Apparatus for testing	P. H. Jackson	134, 549	Jan. 7, 1873	42	13, 14	3	10
Glass and silver ware, Composition for cleaning	W. H. Rosevelt	141, 819	Aug. 12, 1873	374	.....	4	173
Glass, Apparatus for manufacturing window	W. W. Pilkington	134, 926	Jan. 14, 1873	395	126	3	52
Glass articles, Process of forming orifices and necks on	J. Wing	143, 863	Oct. 21, 1873	446	148	4	435
Glass-blowers, Chimney-tool for	J. G. Mustin	144, 628	Nov. 18, 1873	400	134	4	534
Glass-blowing machine	S. L. Fleishman	142, 845	Sept. 16, 1873	470	159	4	302
Glass, Flattening-oven for plate	J. B. Boulicault	144, 946	Nov. 25, 1873	675	229	4	567
Glass-furnace	E. Bayard and B. A. Mason	136, 957	Mar. 18, 1873	544	179	3	307
Glass-furnace	W. Leighton, jr.	141, 935	Aug. 19, 1873	488	161	4	192
Glass-furnace	A. Pocheron	141, 666	Aug. 12, 1873	241	76	4	162
Glass, &c., Machine for marking designs on	H. A. Wassell	135, 610	Feb. 4, 1873	206	64, 65	3	143
Glass-mold	H. Wickham, jr.	135, 502	Feb. 4, 1873	99	31	3	135
Glass-mold carriage	D. Bennett, M. Krebs, and J. Haley	138, 368	Apr. 29, 1873	1,023	322	3	482
Glass-mold, Method of treating	J. Lydiatt	142, 573	Sept. 9, 1873	233	76	4	273
Glass, Ornamental window	C. Frederici	141, 782	Aug. 12, 1873	342	112	4	171
Glass, porcelain, &c., Attaching metal cap to	C. B. Jenkins	139, 961	June 17, 1873	482	152	3	671
Glass, Pot for melting	J. Dougherty	134, 789	Jan. 14, 1873	276	90	3	42
Glass-press	J. Haley	138, 750	May 13, 1873	263	82	3	529
Glass-press	A. M. Smith	135, 292	Jan. 28, 1873	746	240	3	107
Glass, Process of gilding on	V. Schwarzenbach	141, 670	Aug. 12, 1873	244	.....	4	163
Glass, Process of ornamenting	S. M. Adams	141, 305	July 29, 1873	903	.....	4	118
Glass, Process of ornamenting	C. Schüssler	142, 125	Aug. 26, 1873	676	.....	4	216
Glass-stock, Sifter, mixer, and grinder for	G. B. Barnes and J. A. Leasure	138, 554	May 6, 1873	79	25	3	504
Glass-ware, Manufacture of	A. H. Baggs	145, 144	Dec. 2, 1873	98	32, 33	4	593
Glass-ware, Manufacture of stemmed	J. Oesterling	143, 778	Oct. 21, 1873	372	123	4	429
Glass-ware, Method and mold for manufacturing	J. S. and T. B. Atterbury	139, 993	June 17, 1873	506	{ 160 161 }	{ 3 3 }	673
Glass-ware mold	G. H. Lomax	143, 629	Oct. 14, 1873	213	72	4	406
Glazier's tool	S. G. Monce	140, 426	July 1, 1873	70	25	4	14
Globe-holders, Manufacture of	C. H. Barney	143, 656	Oct. 14, 1873	235	79	4	408
Glove	R. D. Burr	141, 203	July 29, 1873	808	264	4	110
Glove	T. G. Foster	144, 665	Nov. 18, 1873	431	146	4	536
Glove	E. V. Whitaker	136, 115	Feb. 18, 1873	665	217	3	205
Glove, Corn-husking	P. N. Harts	137, 918	Apr. 15, 1873	583	183	3	429
Glove-fastener	L. Meyers	141, 580	Aug. 5, 1873	145	47	4	147
Glove-fastener	L. Ferris	144, 197	Nov. 4, 1873	23	7	4	480
Glove-fastening	H. P. Carver	140, 613	July 8, 1873	249	84	4	40
Glove-fastening	D. A. Cooper	139, 703	June 10, 1873	250	79	3	645
Glove-fastening	C. H. Hall and R. Knott	141, 555	Aug. 5, 1873	125	39	4	145
Glove, Gauntlet	F. Farrant	145, 099	Dec. 2, 1873	57	18	4	590
Glove, Gauntlet	I. B. Whipple	137, 988	Apr. 15, 1873	641	202	3	434
Glove-turning machine	F. Vanderpool	146, 111	Dec. 30, 1873	990	319	4	712
Glue, Manufacture of	O. S. Follett	137, 835	Apr. 15, 1873	515	.....	3	423
Glue, Manufacture of	B. F. Shaw	145, 454	Dec. 9, 1873	368		4	627
Glue, Manufacture of	W. Plumer	141, 379	July 29, 1873	978	{ 317 318 }	{ 4 4 }	123

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Gold and silver from base metals, Process for separating	E. Lundquist	137, 375	Apr. 1, 1873	86		3	364
Gold and silver from lead containing the same, Separating.	C. Roswag and A. N. De Pauville	138, 938	May 13, 1873	423	132	3	542
Gold and silver ore, Treating	J. Kallmes	138, 500	May 6, 1873	27	.....	3	500
Gold leaf for book-binder's use, Manufacture of	R. E. Hastings	146, 001	Dec. 30, 1873	890	.....	4	704
Gong, Door	C. W. Penfield	143, 996	Oct. 23, 1873	581	193	4	456
Goods on bias, Device for aiding cutting	G. Moore	134, 918	Jan. 14, 1873	390	124	3	51
Goods on bias, Device for marking	G. Moore	134, 919	Jan. 14, 1873	391	124	3	51
Governor	J. B. Duff	137, 662	Apr. 8, 1873	350	108	3	397
Governor	J. E. Hugou	144, 205	Nov. 4, 1873	33	9	4	480
Governor	M. Gally	135, 423	Feb. 4, 1873	28	8	3	130
Governor	R. W. Gardner	139, 055	May 20, 1873	533	169	3	564
Governor	E. Towns	139, 631	June 3, 1873	160	53	3	622
Governor cut-off gear	H. H. Meyer	142, 491	Sept. 2, 1873	155	50	4	254
Governor, Engine	E. Buss	140, 467	July 1, 1873	105	35, 36	4	17
Governor, Engine	J. Hendy	140, 414	July 1, 1873	62	22	4	13
Governor for gas-exhauster	R. Koch	137, 215	Mar. 25, 1873	788	260	3	337
Governor for steam-heater	S. J. Olsson	140, 156	June 24, 1873	674	212	3	694
Governor, Marine steam-engine	O. Marland	138, 420	Apr. 29, 1873	1, 069	337	3	485
Governor, Safety appliance for	J. Gaskell	144, 973	Nov. 25, 1873	698	235	4	569
Governor, Steam-engine	J. M. Bottum	137, 652	Apr. 8, 1873	339	105	3	396
Governor, Steam-engine	R. W. Gardner	142, 846	Sept. 16, 1873	471	159	4	302
Governor, Steam-engine	J. C. Hoadley	144, 098	Oct. 28, 1873	666	220	4	463
Governor, Steam-engine	J. E. Hugou	144, 204	Nov. 4, 1873	32	9	4	480
Governor, Steam-engine	A. Matson	142, 167	Aug. 26, 1873	708	234	4	219
Governor, Steam-engine	W. Ord	138, 521	May 6, 1873	49	17	3	501
Governor, Steam-engine	S. P. Ruggles	142, 869	Sept. 16, 1873	488	167	4	304
Governor, Steam-engine	C. R. Rungvist	143, 642	Oct. 14, 1873	224	75	4	407
Governor, Steam-engine	B. B. Smith	137, 573	Apr. 8, 1873	275	84	3	391
Grafting	C. E. Symonds	141, 092	July 22, 1873	690	232	4	93
Grain and malt cleaner and crusher	N. Thielen	145, 314	Dec. 9, 1873	253	84	4	618
Grain and rust cleaning machine	J. Johnson	139, 248	May 27, 1873	730	230	3	588
Grain and seed, Apparatus for protecting	J. M. Joannides	136, 437	Mar. 4, 1873	72	25	3	251
Grain and seed drill	J. H. Shreiner	141, 730	Aug. 12, 1873	291	95	4	167
Grain, &c., Apparatus for collecting and transporting	J. and G. Richards	143, 254	Sept. 30, 1873	819	281	4	357
Grain, Apparatus for conveying	H. G. Yates	144, 589	Nov. 11, 1873	360	{ 121 122 }	4	519
Grain-bag	W. B. Carlock	143, 876	Oct. 21, 1873	456	152	4	435
Grain-band, bag-tie, &c.	E. Foote	135, 899	Feb. 18, 1873	483	156	3	191
Grain-basket	H. C. Jones	145, 573	Dec. 16, 1873	488	161	4	649
Grain-binder	J. F. Gordon	140, 822	July 15, 1873	430	146	4	62
Grain-binder	A. S. Hoyt	141, 507	Aug. 5, 1873	86	27	4	142
Grain-binder	S. D. Locke	135, 826	Feb. 11, 1873	409	132	3	171
Grain-binder	S. D. Locke	139, 008	May 20, 1873	495	156	3	561
Grain-binder	A. Phillippi	142, 040	Aug. 19, 1873	582	191	4	199
Grain-binder	Q. A. Scott	140, 083	June 17, 1873	589	{ 186 187 }	3	680
Grain-binder	J. Waddington	142, 304	Aug. 26, 1873	821	272	4	229
Grain-cleaner	W. Houghton	144, 455	Nov. 11, 1873	245	83	4	510
Grain-cleaner	S. Moore	139, 257	May 27, 1873	736	233	3	588
Grain-cleaning machine	G. E. Throop	135, 675	Feb. 11, 1873	273	86	3	161
Grain-conveyer	C. Lazarevitch	145, 112	Dec. 2, 1873	65	21	4	590
Grain-cradle	D. Duesler	145, 933	Dec. 30, 1873	830	271	4	699
Grain-distributor, Rotary	A. D. Foote	144, 753	Nov. 18, 1873	505	171	4	542
Grain-drill	G. G. Blunt	139, 860	June 17, 1873	397	125	3	664
Grain-drill	J. P. Fulghum	145, 795	Dec. 23, 1873	689	226	4	677
Grain-drill	S. Hart	144, 452	Nov. 11, 1873	243	82	4	510
Grain-drill	J. F. Keller	137, 929	Apr. 15, 1873	590	186	3	429
Grain-drill	J. King	138, 166	Apr. 22, 1873	813	259	3	457
Grain-drill	S. R. Nye	135, 932	Feb. 18, 1873	508	166	3	193
Grain-drill	C. E. Patric	136, 260	Feb. 25, 1873	804	261	3	228
Grain-drill	G. A. Pursly	139, 610	June 3, 1873	146	48	3	621
Grain-drill, Grass-seed attachment to	J. P. Fulghum	140, 694	July 8, 1873	315	107	4	45
Grain-drill, teeth	J. D. Welsh	135, 186	Jan. 21, 1873	627	205	3	86
Grain-drier	E. S. Forgy	137, 606	Apr. 8, 1873	302	93	3	393
Grain-drier	W. F. Morgan	141, 160	July 22, 1873	754	248	4	98
Grain-drier	A. Soper	144, 710	Nov. 18, 1873	468	159	4	539
Grain-drier	R. J. Williams	142, 184	Aug. 26, 1873	722	239	4	220
Grain-elevator	H. Merrill	138, 175	Apr. 22, 1873	823	261	3	458
Grain, Elevating, conveying, storing, and shipping	H. I. P. F., and E. D. Chase	138, 994	May 20, 1873	481	152	3	560
Grain in bulk, Vessel for transporting	F. Demartini and J. Chertizza	142, 842	Sept. 16, 1873	468	158	4	302
Grain raker and loader	G. S. Dudley	139, 303	May 27, 1873	779	247	3	591
Grain-register	G. W. Nesmith	143, 527	Oct. 7, 1873	109	38	4	389
Grain-register	J. S. Price and P. Miller	134, 928	Jan. 14, 1873	397	127	3	52
Grain-register	S. Ramer	135, 845	Feb. 11, 1873	422	137	3	172
Grain-sampler	J. J. Bois	143, 953	Oct. 28, 1873	541	179	4	452
Grain-scourer	C. B. Horton	144, 980	Nov. 25, 1873	703	237	4	569
Grain-scourer	T. Shiveley	135, 602	Feb. 4, 1873	200	61, 62	3	143
Grain-separator	W. B. Allen	135, 746	Feb. 11, 1873	332	106	3	166
Grain-separator	J. W. Breese	142, 672	Sept. 9, 1873	316	105	4	279
Grain-separator	S. Daw	144, 836	Nov. 25, 1873	586	200	4	559
Grain-separator	O. J. Everson	141, 130	July 22, 1873	724	241	4	95
Grain-separator	J. Koons	143, 081	Sept. 23, 1873	672	231	4	329
Grain-separator	S. Lessig, sr	144, 211	Nov. 4, 1873	37	11	4	481
Grain-separator	G. B. Turner	141, 524	Aug. 5, 1873	99	31	4	143
Grain separator and scourer	W. E. Turner	141, 676	Aug. 12, 1873	249	79	4	163
Grain separator and scourer	S. W. Andrews and L. Godfrey	144, 180	Nov. 4, 1873	2	1	4	478
Grain separator, Blast-governor for	W. P. Clifford	143, 331	Sept. 30, 1873	884	302	4	363
Grain separator, Sieve for	T. Hoge	138, 563	May 6, 1873	87	28	3	504
Grain-steaming apparatus	E. Doud	141, 637	Aug. 12, 1873	215	68	4	160
Grain, Ventilating	J. H. Ebert and E. Pitts	142, 008	Aug. 19, 1873	548	181	4	197
Grain, Ventilating	B. Dunwiddie	139, 126	May 20, 1873	604	189	3	570
Grain-weigher, Automatic	J. W. Hill	137, 921	Apr. 15, 1873	585	184	3	429
Grape and flower picker	C. W. H. Delano	144, 837	Nov. 25, 1873	587	200	4	559
Grapple	J. Burkhardt	137, 592	Apr. 8, 1873	289	90	3	392

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Grate-bar.....	G. H. Clark.....	142, 146	Aug. 26, 1873	692	228	4	218
Grate-bar.....	A. F. Crowell.....	143, 224	Sept. 30, 1873	792	273	4	355
Grate-bar.....	R. A. Hutchinson.....	142, 471	Sept. 2, 1873	135	44	4	253
Grate-bar.....	H. C. Kerstine.....	143, 079	Sept. 23, 1873	670	231	4	329
Grate-bar.....	J. A. Sinclair.....	135, 447	Feb. 4, 1873	52	17	3	131
Grate-bar.....	P. Umholtz.....	144, 372	Nov. 7, 1873	165	55	4	492
Grate bar, Furnace.....	R. C. Graves.....	135, 799	Feb. 11, 1873	383	123	3	169
Grate bar, Furnace.....	A. Rawson.....	141, 890	Aug. 19, 1873	452	147	4	189
Grate, Casting fire.....	H. Anshutz.....	134, 832	Jan. 14, 1873	316	101	3	45
Grate, Coal-stove.....	S. G. Morrison.....	141, 452	Aug. 5, 1873	38	12	4	138
Grate, Fire.....	W. H. Farris.....	141, 780	Aug. 12, 1873	339	111 112	4	170
Grate, Fire-place.....	J. S. Runyan.....	142, 514	Sept. 2, 1873	172	56	4	255
Grate, Fire-place.....	J. E. Wood.....	145, 141	Dec. 2, 1873	97	32	4	593
Grate, Fire-place.....	J. M. Woodcock.....	137, 993	Apr. 15, 1873	646	204	3	434
Grate, Fire-place and hot-air furnace.....	J. H. Sherwood.....	136, 775	Mar. 11, 1873	379	125	3	285
Grate, Furnace.....	W. B. Le Van.....	141, 936	Aug. 19, 1873	489	161	4	192
Grate, Furnace.....	H. Ryder.....	136, 673	Mar. 11, 1873	297	99	3	278
Grate, Furnace.....	T. Bolzano.....	135, 390	Jan. 28, 1873	835	269	3	115
Grate, Furnace.....	J. Withington.....	142, 068	Aug. 19, 1873	608	200	4	201
Grate, Rocking.....	J. Seddon.....	143, 034	Sept. 23, 1873	634	216 217	4	326
Grate, Shade and draft-blower for.....	F. McCarthy.....	134, 556	Jan. 7, 1873	50	15	3	11
Grate, Stove.....	E. Dewitt.....	135, 095	Jan. 21, 1873	551	180	3	80
Grate, Stove.....	E. Dewitt.....	135, 096	Jan. 21, 1873	552	180	3	80
Grate, Stove.....	S. Duncan.....	135, 471	Feb. 4, 1873	72	23	3	133
Grate, Stove.....	G. W. Eltonhead.....	143, 443	Oct. 7, 1873	40	14	4	384
Grate, Stove.....	W. Hagerty.....	145, 172	Dec. 2, 1873	125	41	4	595
Grate, Stove.....	A. M. Harris.....	135, 909	Feb. 18, 1873	490	159	3	192
Grate, Stove.....	W. J. Keep.....	139, 583	June 3, 1873	119	40	3	618
Grate, Stove.....	G. R. Moore.....	145, 360	Dec. 9, 1873	291	98	4	621
Grate, Stove.....	S. Smyth.....	140, 224	June 24, 1873	729	230	3	699
Grate, Stove.....	J. R. Stone.....	135, 735	Feb. 11, 1873	323	103	3	165
Grate, Stove.....	D. Stuart and L. Bridge.....	145, 253	Dec. 2, 1873	193	66	4	600
Grate, Stove.....	W. H. Stryker.....	143, 541	Oct. 7, 1873	123	41	4	390
Grate, Stove.....	J. S. Van Buren.....	139, 934	June 17, 1873	463	145	3	669
Grate, Stove and fire-place.....	W. B. Sutor.....	137, 733	Apr. 8, 1873	416	128	3	402
Grate, Stove and furnace.....	J. J. Richardson.....	141, 891	Aug. 19, 1873	453	148	4	189
Grate, Stove, furnace, &c.....	S. Smith.....	143, 856	Oct. 21, 1873	441	147	4	434
Grater.....	G. Booth.....	138, 122	Apr. 22, 1873	776	248	3	454
Grater, Nutmeg.....	T. Marriott.....	145, 884	Dec. 23, 1873	768	250	4	683
Grater, Nutmeg.....	A. L. Platt.....	138, 191	Apr. 22, 1873	841	266	3	459
Grater, Vegetable.....	G. Booth.....	138, 123	Apr. 22, 1873	777	248	3	454
Grater, Vegetable.....	A. S. McNeir and W. D. Stockton.....	139, 173	May 20, 1873	650	203	3	573
Grave-covering.....	J. R. Abrams.....	144, 300	Nov. 4, 1873	106	36	4	487
Grave-guard.....	A. Rank.....	140, 728	July 8, 1873	341	115	4	47
Grave-mound cover.....	B. Hunter.....	144, 392	Nov. 11, 1873	194	66	4	506
Gridiron.....	A. Bataille.....	136, 955	Mar. 18, 1873	543	179	3	307
Griddle.....	S. Kennedy.....	142, 164	Aug. 26, 1873	706	233	4	219
Griddle-greaser.....	W. H. Bixler.....	140, 992	July 22, 1873	602	203	4	85
Grinding-machine.....	P. D. Cummings.....	145, 488	Dec. 16, 1873	408	134	4	642
Grinding metal castings, Machine for.....	G. H. Spencer.....	137, 104	Mar. 25, 1873	686	228	3	330
Grinding-mill.....	J. G. Baker.....	193, 867	Oct. 21, 1873	448	149	4	435
Grinding-mill.....	D. A. Caldwell.....	145, 786	Dec. 23, 1873	682	223	4	677
Grinding-mill.....	P. Evans.....	143, 816	Oct. 21, 1873	404	135	4	431
Grinding-mill.....	J. T. Harvey.....	136, 321	Feb. 25, 1873	857	276	3	232
Grinding-mill.....	R. and S. Patterson.....	143, 710	Oct. 14, 1873	293	96	4	412
Grinding mill, Barley.....	J. Mackay.....	136, 527	Mar. 4, 1873	157	50, 51	3	258
Grinding-mill feeding-device.....	S. Middleton.....	143, 989	Oct. 28, 1873	572	190	4	455
Grinding-mill feed-regulator.....	E. H. Austin.....	143, 315	Sept. 30, 1873	870	298	4	362
Grinding-mill feed-regulator.....	J. C. Dunlap.....	138, 384	Apr. 29, 1873	1, 035	326	3	483
Grinding-mill hopper.....	M. Replogle.....	139, 973	June 17, 1873	491	155	3	671
Grinding-mill hopper.....	G. S. Thompson.....	138, 212	Apr. 22, 1873	857	271	3	460
Grinding-mill hopper and casing.....	J. M. Finch.....	137, 429	Apr. 1, 1873	134	44	3	368
Grinding-mill, Metallic.....	H. B. Stevens.....	137, 503	Apr. 1, 1873	207	63	3	374
Grinding-mill, Trammings bolt for.....	J. T. Noye.....	142, 809	Sept. 16, 1873	441	148 149	4	300
Grinding, scouring, and polishing machine.....	A. B. Walters.....	135, 456	Feb. 4, 1873	60	19	3	132
Grindstone.....	J. F. and S. H. Green.....	140, 823	July 15, 1873	431	146	4	63
Grindstone-cutting machine.....	J. P. Gillespie.....	137, 435	Apr. 1, 1873	139	46	3	368
Grindstone, Device for wetting.....	D. Cumming, jr.....	144, 891	Nov. 25, 1873	631	215	4	563
Grindstone-hanger.....	S. L. Bignall.....	143, 952	Oct. 28, 1873	540	179	4	452
Grindstone trough and support.....	C. P. Richardson.....	136, 939	Mar. 18, 1873	530	175	3	306
Groove cutting-machine, Cam.....	J. S. George and W. Houghtaling.....	137, 358	Apr. 1, 1873	74	24	3	363
Guard: See Bed or cradle guard. Candle-guard. Cattle-guard. Door and window guard. Grave-guard. Hame-guard. Hat and coat guard. Hatchway-guard. Key-hole guard. Knob-guard. Lantern-guard. Loom-shuttle guard. Railway cattle-guard. Railway safety-guard. Saw-guard. Weather-guard. Window-guard.							
Guano and seed distributor.....	J. H. Boyd.....	144, 250	Nov. 4, 1873	71	23	4	484
Guitar.....	R. Knaffl.....	134, 679	Jan. 7, 1873	171	56	3	20

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Guitar.....	G. D. Reed.....	145,241	Dec. 2, 1873	181	6	4	599
Gum and caoutchouc, Treating vulcanizable.....	D. M. Lamb.....	144,623	Nov. 18, 1873	397		4	533
Gum compound, Vulcanizable.....	D. M. Lamb.....	144,622	Nov. 18, 1873	396	.....	4	533
Gun, Air-repeating.....	P. Giffard.....	136,315	Feb. 25, 1873	853	274	3	232
Gun-barrel, Instrument for cleaning.....	W. E. Turner.....	139,633	June 3, 1873	161	54	3	622
Gun-barrel, Means of attaching the fore-end stock to.....	J. Deeley and J. S. Edge, jr.....	140,482	July 1, 1873	117	40	4	18
Gun, Battery.....	A. E. Miltimore.....	145,224	Dec. 2, 1873	167	57	4	598
Gun, Breech-loading and magazine.....	B. and W. G. Burton.....	143,614	Oct. 14, 1873	200	67, 68	4	405
Gun-cleaner.....	C. G. Gould.....	143,139	Sept. 23, 1873	715	246	4	333
Gun-cotton, Manufacture of.....	S. J. Mackie.....	141,654	Aug. 12, 1873	230	.....	4	162
Gun-lock.....	C. Gordon.....	138,145	Apr. 22, 1873	795	{ 253 } { 254 }	3	455
Gun-lock.....	W. J. Morris.....	137,381	Apr. 1, 1873	90	29	3	364
Gun-lock, Safety.....	D. H. Mapother.....	135,233	Jan. 28, 1873	697	223	3	104
Gun, Machine.....	W. B. Farwell.....	137,428	Apr. 1, 1873	132	43	3	368
Gun, Machine.....	C. Stensland.....	143,729	Oct. 14, 1873	310	{ 102 } { 103 }	4	413
Gun, Magazine.....	A. Swingle.....	137,392	Apr. 1, 1873	101	33	3	365
Gun, Means for operating heavy.....	A. Moncrieff.....	144,120	Oct. 28, 1873	683	226	4	464
Gunpowder, Manufacture of.....	F. Burney.....	145,149	Dec. 2, 1873	102	34	4	593
Gun-sight.....	M. W. Harrington.....	136,159	Feb. 25, 1873	722	233	3	222
Gun-sight.....	H. A. Shottky and T. Simendinger.....	134,772	Jan. 14, 1873	259	85	3	41
Gun-stock and spade, Combined.....	W. E. Blake.....	135,624	Feb. 11, 1873	227	71	3	157
Gun, Traversing-mechanism for machine.....	R. J. Gatling.....	145,563	Dec. 16, 1873	481	157	4	648
Gutter, Metallic.....	T. McClunie.....	139,324	May 27, 1873	793	253	3	593
Gymnastic apparatus.....	J. Smith.....	138,590	May 6, 1873	108	35	3	506
H.							
Hair, Curling.....	E. T. Crain.....	138,995	May 20, 1873	483	.....	3	560
Hair, Machine for heading.....	E. Hough.....	145,060	Dec. 2, 1873	18	7	4	587
Hair, Machine for heading.....	R. Turneure.....	145,259	Dec. 2, 1873	198	68	4	601
Hair, Manufacture of crimped.....	R. F. Donisthorpe and T. A. W. Clarke.....	145,056	Dec. 2, 1873	14	5, 6	4	587
Hair, Medical compound for treating the.....	W. F. Staten.....	145,313	Dec. 9, 1873	253	.....	4	618
Hair-wash.....	R. Travis.....	142,532	Sept. 2, 1873	189	.....	4	257
Halter for hitching horses, Pastern.....	J. C. Ford.....	144,198	Nov. 4, 1873	24	7	4	480
Haltering, &c., Fastening for.....	E. M. Kinne.....	136,071	Feb. 18, 1873	627	206	3	202
Hame.....	J. Thornton and E. G. Latta.....	144,371	Nov. 4, 1873	165	55	4	492
Hame-fastener.....	T. L. Booker.....	141,690	Aug. 12, 1873	261	84	4	164
Hame-fastener.....	J. G. Fleming.....	145,163	Dec. 2, 1873	116	38	4	594
Hame-fastening.....	E. Covert.....	140,475	July 1, 1873	112	38	4	17
Hame-guard harness.....	C. H. Allen.....	136,403	Mar. 4, 1873	45	16	3	249
Hame, Harness.....	C. Robinson.....	137,241	Mar. 25, 1873	810	266	3	359
Hame-staple socket.....	R. J. Algeo.....	136,803	Mar. 18, 1873	417	139	3	297
Hammer, Blacksmiths'.....	G. B. Cubberley.....	136,139	Feb. 25, 1873	707	228	3	220
Hammer, Bush.....	E. J. Worcester.....	138,975	May 13, 1873	451	142	3	545
Hammer-die, Machine for feeding wire to.....	W. H. Dayton.....	141,922	Aug. 19, 1873	477	157	4	191
Hammers, Die for forging.....	T. Daffin.....	143,406	Oct. 7, 1873	9	3	4	381
Hammer, Die for forming.....	J. Yerkes.....	142,070	Aug. 19, 1873	610	200	4	201
Hammer, Drop.....	J. McGeorge.....	140,717	July 8, 1873	333	113	4	47
Hammer, Drop.....	J. Tobin.....	145,601	Dec. 16, 1873	512	168	4	651
Hammer for planishing sheet-iron.....	W. D. Wood.....	142,754	Sept. 9, 1873	385	129	4	285
Hammer lifter, Drop.....	C. Peck.....	142,723	Sept. 9, 1873	355	120	4	282
Hammer, Machine for forging.....	W. Evans.....	144,969	Nov. 25, 1873	694	234	4	569
Hammer, Power.....	J. C. Butterfield.....	144,058	Oct. 28, 1873	634	209	4	460
Hammer, Power.....	J. C. Butterfield.....	144,059	Oct. 28, 1873	636	209	4	460
Hammer, Power.....	J. M. Long.....	136,253	Feb. 25, 1873	797	{ 259 } { 259 }	3	228
Hammer, Power.....	S. Pennock.....	137,092	Mar. 25, 1873	675	224	3	329
Hammer, Revolving.....	G. Stacy.....	144,638	Nov. 18, 1873	408	137	4	534
Hammer, Steam.....	D. R. Quick and G. A. Gardner.....	141,667	Aug. 12, 1873	242	77	4	162
Hammer, Steam drop.....	F. B. Miles.....	137,313	Apr. 1, 1873	30	10	3	359
Hammer, Tack.....	G. J. Capewell.....	144,953	Nov. 25, 1873	680	230	4	568
Hammock, Device for suspending.....	O. Tufts.....	143,392	Sept. 30, 1873	942	319	4	367
Hammock-lounge.....	J. C. Craft.....	142,327	Sept. 2, 1873	5	2	4	242
Hammock-support.....	F. Park.....	144,219	Nov. 4, 1873	44	13	4	451
Hammock-support.....	O. Tufts.....	144,168	Oct. 28, 1873	725	242	4	467
Handle:							
See Auger-handle.							
Awl-handle.							
Broom-handle.							
Brush-handle.							
Burial-casket handle.							
Coffin-handle.							
Comb-handle.							
Tile-handle.							
Gimlet-handle.							
Knife-handle.							
Latch-handle.							
Plow-handle.							
Pump-handle.							
Saw-handle.							
Sheet-metal ware handle.							
Shovel-handle.							
Tool-handle.							
Umbrella-handle.							
Hand-rest.....	I. Belford.....	136,357	Mar. 4, 1873	4	1	3	245
Hand-rubber.....	W. H. Blye.....	145,927	Dec. 30, 1873	826	269	4	699
Hand-washing rubber.....	A. S. Mann.....	144,118	Oct. 28, 1873	682	226	4	464
Hanger:							
See Eaves-trough hanger.							
Grindstone-hanger.							
Journal or shaft hanger.							
Shaft-hanger.							
Tobacco-hanger.							

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Hanging bracket or shelf	A. C. Brown	136,900	Mar. 18, 1873	498	165	3	303
Harness	E. Covert	141,698	Aug. 12, 1873	266	86	4	164
Harness	G. Renton	138,530	May 6, 1873	57	19	3	502
Harness and saddle-pad	G. Elsey	135,790	Feb. 11, 1873	375	120	3	169
Harness-attachment	E. Croughwell, A. Tillman, and E. L. Vanderburg	142,085	Aug. 26, 1873	639	210	4	214
Harness check-hook	H. A. Carlton	138,003	Apr. 22, 1873	672	213	3	445
Harness check-loop	W. Parsons	136,454	Mar. 4, 1873	86	29	3	252
Harness-clasp	M. A. Penn	137,954	Apr. 15, 1873	612	193	3	431
Harness coach-pad	A. Gilliam	141,873	Aug. 19, 1873	439	143	4	188
Harness-fastening	E. Covert	140,474	July 1, 1873	112	38	4	17
Harness-loop	F. Hickman	145,299	Dec. 9, 1873	238	80	4	617
Harness-maker's Bench-iron for	J. Thornton and E. G. Latta	142,967	Sept. 16, 1873	574	194	4	311
Harness-maker's clamp	D. Eighme	142,384	Sept. 2, 1873	59	19	4	247
Harness-maker's gage	D. G. Garlock	135,472	Feb. 4, 1873	73	23	3	133
Harness, Mode of attaching sleigh-bell to	B. E. Dexter	140,123	June 24, 1873	645	203	3	692
Harness-mounting	T. Fawcett	143,817	Oct. 21, 1873	405	135	4	431
Harness-mounting	J. F. Knorr	136,073	Feb. 18, 1873	629	206	3	202
Harness-pad	J. D. Groff and K. H. Wilson	136,155	Feb. 25, 1873	720	232	3	221
Harness-pad	S. A. Marker	144,853	Nov. 25, 1873	603	205	4	561
Harness-pad	M. W. Pond	140,384	July 1, 1873	42	14	4	11
Harness-pad	M. W. Pond	140,385	July 1, 1873	43	14	4	11
Harness-pad	W. A. Reddick	143,253	Sept. 30, 1873	818	280	4	357
Harness pad-tree	W. H. Taylor	141,385	Aug. 12, 1873	388	126	4	174
Harness-saddle	A. Gilliam	144,613	Nov. 18, 1873	389	130	4	533
Harness-saddle	A. V. Sargeant	136,870	Mar. 18, 1873	470	156	3	301
Harness-saddle	S. E. Tompkins	140,968	July 15, 1873	566	190	4	73
Harness-saddle	S. E. Tompkins	140,969	July 15, 1873	567	190	4	73
Harness-saddle	S. E. Tompkins	140,970	July 15, 1873	569	191	4	74
Harness-saddle, Back-band of	S. F. Marshall	135,831	Feb. 11, 1873	412	134	3	171
Harness-saddle, Buckle-attachment to	J. B. Welpton	137,519	Apr. 1, 1873	220	67	3	375
Harness-saddle, Check-hook for	A. V. Sargent	142,415	Sept. 2, 1873	81	27	4	249
Harness saddle-pad	H. Lerew	139,403	May 27, 1873	868	278	3	599
Harness saddle-tree	M. W. Pond	143,381	Sept. 30, 1873	933	316	4	366
Harness safety-strap	C. W. Nichols	145,006	Nov. 25, 1873	726	245	4	572
Harness-trimmings, Manufacture of rubber-coated	A. Allbright	137,873	Apr. 15, 1873	544	170	3	425
Harrow	W. Brown	136,027	Feb. 18, 1873	588	193	3	199
Harrow	A. C. Carnes	140,403	July 1, 1873	55	19	4	12
Harrow	H. Cartwright	135,464	Feb. 4, 1873	67	21	3	133
Harrow	J. F. Gazley	139,309	May 27, 1873	784	249	3	592
Harrow	L. C. Gifford	136,717	Mar. 11, 1873	331	109	3	281
Harrow	D. L. Jaques	137,926	Apr. 15, 1873	588	185	3	429
Harrow	T. M. King	139,065	May 20, 1873	546	172	3	565
Harrow	D. B. Maze	143,520	Oct. 7, 1873	103	36	4	389
Harrow	W. H. Platt	137,569	Apr. 8, 1873	272	83	3	390
Harrow	L. C. Rumberger	145,016	Nov. 25, 1873	736	248	4	572
Harrow	C. Smith	135,448	Feb. 4, 1873	52	17	3	131
Harrow	J. Smith	137,254	Mar. 25, 1873	822	270	3	340
Harrow	A. J. Stewart	144,236	Nov. 4, 1873	60	18	4	483
Harrow	W. D. Summers	142,055	Aug. 19, 1873	598	197	4	200
Harrow	C. Svenzen	143,941	Oct. 21, 1873	507	171	4	440
Harrow	R. L. Taylor	142,593	Sept. 9, 1873	250	82	4	274
Harrow	J. A. Walker	141,021	July 22, 1873	629	212	4	88
Harrow	G. Watt	140,563	July 1, 1873	191	64	4	24
Harrow	J. N. Wamsley	135,022	Jan. 21, 1873	496	159	3	75
Harrow	H. Wendover	137,520	Apr. 1, 1873	221	68	3	375
Harrow	P. N. Woodworth	139,987	June 17, 1873	502	159	3	672
Harrow	M. K. Young	144,044	Oct. 28, 1873	620	205	4	459
Harrow and seeder combined	L. G. Jackson	138,806	May 13, 1873	311	96	3	533
Harrow and seeder combined, Wheel	F. Bramer	140,182	June 24, 1873	697	219	3	696
Harrow, Circular	G. W. Hills	144,978	Nov. 25, 1873	701	237	4	569
Harrow, Revolving	H. Mittendorf	136,169	Feb. 25, 1873	730	235	3	222
Harrow, Rotary	R. Rakestraw	139,814	June 10, 1873	351	109	3	653
Harrow, Sulky	W. C. Bye	136,131	Feb. 25, 1873	698	226	3	220
Harrow, Sulky	P. Speelman	144,231	Nov. 4, 1873	56	17	4	482
Harrow, Sulky	G. W. Van Gorder	136,564	Mar. 4, 1873	192	63	3	260
Harrow-teeth	W. H. Platt	143,713	Oct. 14, 1873	296	97	4	412
Harrow-teeth, Reversible	G. W. Hurst	140,198	June 24, 1873	710	223	3	697
Harvester	H. A. Adams	144,179	Nov. 4, 1873	1	1	4	478
Harvester	E. M. Awrey	140,804	July 15, 1873	412	140	4	61
Harvester	I. W. Bragg	140,675	July 8, 1873	298	100	4	44
Harvester	S. D. Carpenter	144,189	Nov. 4, 1873	14	4	4	479
Harvester	E. H. Clinton	145,050	Dec. 2, 1873	7	2, 3	4	586
Harvester	J. S. Davis	139,122	May 20, 1873	597	188	3	569
Harvester	J. W. H. Doubler	142,903	Sept. 16, 1873	516	176	4	306
Harvester	J. H. Elward	141,863	Aug. 19, 1873	426	140	4	187
Harvester	J. H. Elward	141,864	Aug. 19, 1873	427	{ 140 141 }	{ 4 4 }	187
Harvester	J. H. Elward	141,865	Aug. 19, 1873	429	141	4	187
Harvester	J. H. Elward	141,866	Aug. 19, 1873	431	141	4	187
Harvester	J. H. Elward	141,867	Aug. 19, 1873	433	141	4	187
Harvester	J. H. Elward	141,868	Aug. 19, 1873	424	142	4	187
Harvester	J. Farrington	134,531	Jan. 7, 1873	26	9	3	9
Harvester	W. Harrison	139,787	June 10, 1873	327	102	3	651
Harvester	P. F. Hodges	142,231	Aug. 26, 1873	763	251	4	224
Harvester	J. F. Kingwill	136,325	Feb. 25, 1873	861	277	3	232
Harvester	G. W. Leisher	139,900	June 17, 1873	437	136	3	667
Harvester	C. Lidren	135,480	Feb. 4, 1873	81	25	3	134
Harvester	S. Luce	141,938	Aug. 19, 1873	491	162	4	192
Harvester	J. P. Manny	135,041	Jan. 21, 1873	512	{ 165 166 }	{ 3 3 }	76
Harvester	C. N. McCandlish and J. C. Naginey	137,614	Apr. 8, 1873	308	96	3	393
Harvester	S. L. McCulloch	138,172	Apr. 22, 1873	819	{ 260 261 }	{ 3 3 }	457

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Harvester	W. K. Miller	139, 596	June 3, 1873	131	43, 44	3	619
Harvester	J. G. Perry	142, 811	Sept. 16, 1873	442	149	4	300
Harvester	W. K. Rairigh	139, 611	June 3, 1873	146	48	3	621
Harvester	W. K. Rairigh	139, 612	June 3, 1873	147	48, 49	3	621
Harvester	B. W. S. and C. H. Ressler	139, 817	June 10, 1873	354	109	3	653
Harvester	A. Rickart	135, 729	Feb. 11, 1873	318	101	3	165
Harvester	R. A. Roberts	136, 940	Mar. 18, 1873	530	175	3	306
Harvester	J. F. Seiberling	135, 013	Jan. 21, 1873	486	156	3	74
Harvester	J. F. Seiberling	137, 490	Apr. 1, 1873	195	60	3	373
Harvester	J. F. Seiberling	139, 268	May 27, 1873	747	237	3	589
Harvester	W. H. Seymour and D. S. Morgan	135, 731	Feb. 11, 1873	319	{ 101 102 }	{ 3 3 }	165
Harvester	J. H. Shireman	141, 597	Aug. 5, 1873	161	52	4	148
Harvester	H. J. Silvernale	139, 199	May 20, 1873	672	{ 210 211 }	{ 3 3 }	575
Harvester	G. H. Spaulding	140, 738	July 8, 1873	351	118	4	48
Harvester	C. S. Stone	144, 367	Nov. 4, 1873	162	54	4	492
Harvester	Z. Swope	136, 279	Feb. 25, 1873	823	266	3	230
Harvester	E. Taylor	137, 506	Apr. 1, 1873	211	64	3	374
Harvester	J. S. Truxell	136, 628	Mar. 11, 1873	261	88	3	275
Harvester	W. Wallace	131, 970	Aug. 19, 1873	514	169	4	194
Harvester	J. Werner, jr	139, 986	June 17, 1873	501	159	3	672
Harvester	J. D. Wilber	138, 830	May 13, 1873	333	{ 102 103 154 155 }	{ 3 3 4 4 }	535
Harvester	J. D. Wilber	142, 828	Sept. 16, 1873	455	{ 155 270 }	{ 4 3 }	301
Harvester	W. A. Wood	136, 295	Feb. 25, 1873	836	270	3	230
Harvester	T. Y. Woolford	135, 741	Feb. 11, 1873	826	105	3	165
Harvester	H. M. Yale	137, 162	Mar. 25, 1873	735	244	3	334
Harvester	T. Yates	143, 110	Sept. 23, 1873	695	238	4	331
Harvester	G. W. N. Yost	137, 812	Apr. 15, 1873	494	154	3	421
Harvester	G. W. N. Yost	137, 813	Apr. 15, 1873	495	155	3	421
Harvester	G. W. N. Yost	137, 814	Apr. 15, 1873	496	155	3	421
Harvester	G. W. N. Yost	137, 815	Apr. 15, 1873	497	155	3	421
Harvester	C. M. Young	135, 394	Jan. 28, 1873	838	{ 270 271 }	{ 3 3 }	115
Harvester and thrasher combined	J. H. Adamson	140, 396	July 1, 1873	50	17, 18	4	12
Harvester attachment for dumping and shocking sheaves.	W. A. Sharp and C. L. McClung	138, 536	May 6, 1873	61	21	3	502
Harvester, Bean	J. Hinds	137, 370	Apr. 1, 1873	82	27	3	364
Harvester-binder attachment	J. H. Garnhart	142, 331	Sept. 2, 1873	8	3	4	243
Harvester-binder attachment	J. H. Garnhart	143, 505	Oct. 7, 1873	90	31	4	388
Harvester-binder attachment	H. Porter	144, 789	Nov. 18, 1873	534	182	4	545
Harvester-binder attachment	W. L. Sanford	142, 870	Sept. 16, 1873	489	167	4	304
Harvester-binder attachment	T. Urdahl	144, 715	Nov. 18, 1873	472	160	4	539
Harvester-binder attachment	T. Webb	138, 771	May 13, 1873	282	87	3	530
Harvester Binder's stand and table for	W. R. Low	135, 481	Feb. 4, 1873	82	26	3	134
Harvester, Binder's table for	J. H. Smith	135, 168	Jan. 21, 1873	612	{ 199 200 }	{ 3 3 }	84
Harvester, Clover	D. R. Bruton	138, 786	May 13, 1873	295	91	3	531
Harvester, Corn	J. and W. Carrothers	139, 367	May 27, 1873	825	264	3	595
Harvester, Corn	H. M. Carter	135, 403	Feb. 4, 1873	7	3	3	128
Harvester, Corn	L. Hamilton	141, 138	July 22, 1873	731	243	4	96
Harvester, Corn	W. H. Kenyon	134, 678	Jan. 7, 1873	169	56	3	20
Harvester, Corn	J. Kilborn	142, 920	Sept. 16, 1873	528	181	4	307
Harvester, Corn	S. Patton	138, 181	Apr. 22, 1873	828	263	3	458
Harvester, Corn	E. W. Quincy	140, 305	June 24, 1873	798	253	3	705
Harvester, Corn	A. Scott	141, 466	Aug. 5, 1873	51	16	4	139
Harvester, Corn	J. H. Spears and K. and R. Wells	139, 623	June 3, 1873	154	51	3	621
Harvester, Corn	G. M. Tope	140, 971	July 15, 1873	570	{ 191 192 }	{ 4 4 }	74
Harvester, Cotton	J. W. Leigh	136, 924	Mar. 18, 1873	517	170	3	305
Harvester, Cotton	W. H. Pedrick	144, 629	Nov. 18, 1873	401	134	4	534
Harvester-cutter	J. W. H. Doubler	141, 210	July 29, 1873	815	266	4	110
Harvester-cutter	W. McKeever	137, 705	Apr. 8, 1873	388	120	3	400
Harvester-cutter	C. Pomeroy	138, 192	Apr. 22, 1873	842	266	3	459
Harvester-cutter	S. H. Reed and T. Thompson	136, 266	Feb. 25, 1873	813	262	3	229
Harvester-cutter	W. E. Shoales	142, 417	Sept. 2, 1873	84	28	4	249
Harvester-cutter	F. R. and W. O. Sutton	141, 298	July 29, 1873	897	294	4	117
Harvester-cutter	W. Wasson, P. F. Powers, and G. W. Dungan	135, 500	Feb. 4, 1873	97	31	3	135
Harvester-cutter	S. H. Wellings and S. Soules	139, 695	June 10, 1873	243	76	3	644
Harvester-dropper	J. S. Fowler	145, 640	Dec. 16, 1873	545	179	4	654
Harvester-dropper	J. B. Gathright	136, 370	Mar. 4, 1873	18	6	3	247
Harvester-dropper	A. J. Hodges	145, 419	Dec. 9, 1873	342	114	4	625
Harvester-dropper	N. Johnson	139, 395	May 27, 1873	858	274	3	598
Harvester-dropper	W. J. Plecker	138, 526	May 6, 1873	53	18	3	502
Harvester-dropper	J. S. Truxell	143, 391	Sept. 30, 1873	941	318	4	367
Harvester, Dropping platform for	P. Warner	144, 239	Nov. 4, 1873	62	19	4	483
Harvester finger-bar	C. A. Smith	135, 495	Feb. 4, 1873	93	29	3	135
Harvester, Grain-binding	C. F. Goddard	135, 985	Feb. 18, 1873	551	182	3	197
Harvester, Hemp	P. S. Fitch	134, 656	Jan. 7, 1873	147	47	3	18
Harvester-knives, Machine for grinding	J. M. Connel	140, 810	July 15, 1873	421	142	4	62
Harvester-knives, Machine for grinding	J. M. Connel	140, 811	July 15, 1873	422	{ 142 143 }	{ 4 4 }	62
Harvester-knives, Machine for grinding	J. Murphy	136, 171	Feb. 25, 1873	731	236	3	222
Harvester-knives, Machine for sharpening	J. S. Elliott	138, 743	May 13, 1873	258	80	3	528
Harvester-knives, Tempering	J. F. Shippey	138, 349	Apr. 29, 1873	1, 007	317	3	480
Harvester, Lifting-finger for	A. Hughes	144, 457	Nov. 11, 1873	247	83	4	510
Harvester pitman-connection	B. F. Waters	134, 954	Jan. 14, 1873	420	134	3	54
Harvester-platform, Adjustable grain-wheel for	G. M. Patten	134, 610	Jan. 7, 1873	104	34	3	15
Harvester-rake	J. K. Augspurger	142, 139	Aug. 26, 1873	687	226	4	217
Harvester-rake	T. P. Barbour	134, 722	Jan. 14, 1873	221	71	3	38
Harvester-rake	S. Clevenger	141, 695	Aug. 12, 1873	264	85	4	164

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Harvester-rake	J. Collins	135,691	Feb. 11, 1873	288	91	3	162
Harvester-rake	W. T. Eastes	141,127	July 22, 1873	720	{ 239 } 240	{ 4 } 4	95
Harvester-rake	J. Irvine	142,632	Sept. 9, 1873	280	92	4	276
Harvester-rake	E. Lippoldt	144,683	Nov. 18, 1873	447	151	4	537
Harvester-rake	S. D. Locke	142,798	Sept. 16, 1873	431	146	4	299
Harvester-rake	J. B. McMillan	142,490	Sept. 2, 1873	154	50	4	254
Harvester-rake	T. Murphy	142,171	Aug. 26, 1873	711	235	4	219
Harvester-rake	M. L. Nix	141,164	July 22, 1873	758	249	4	98
Harvester-rake	J. L. Owens	142,644	Sept. 9, 1873	289	95	4	277
Harvester-rake	A. Rank	141,668	Aug. 12, 1873	243	77	4	163
Harvester-rake	J. S. Truxell	137,510	Apr. 1, 1873	213	65	3	374
Harvester-reel	C. F. Goddard	142,389	Sept. 2, 1873	62	21	4	247
Harvester-reel	J. Werner, jr.	142,881	Sept. 16, 1873	497	170	4	305
Harvester-reel-rake	C. A. Werden	136,885	Mar. 18, 1873	483	160	3	302
Harvester, &c., seat	J. G. Perry	141,075	July 22, 1873	675	226	4	91
Harvester-seat	G. W. N. Yost	137,816	Apr. 15, 1873	497	155	3	422
Harvester track-clearer	O. Du Bois	137,351	Apr. 1, 1873	68	22	3	362
Harvester-wheel and axle	B. G. Turner	141,965	Aug. 19, 1873	510	168	4	194
Harvesting-machine	E. Bayliss, J. O. Brown, and F. T. Lomont.	143,609	Oct. 14, 1873	196	66	4	405
Hasp-lock	J. Kinzer	140,926	July 15, 1873	525	175	4	70
Hasp-lock	A. B. Smith	139,430	May 27, 1873	829	286	3	600
Hasp-lock	E. P. Stimens and T. C. Martin	136,877	Mar. 18, 1873	477	158	3	302
Hat	J. O'Donnell	138,430	Apr. 29, 1873	1,079	340	3	486
Hat, Adjustable	I. Y. Cassiano	145,092	Dec. 2, 1873	50	16	4	589
Hat and cap, Ear-covering for	B. R. Morse	138,040	Apr. 22, 1873	709	224	3	448
Hat and coat guard	S. N. Robbins	136,005	Feb. 18, 1873	569	188	3	198
Hat and coat hook	C. G. Cole	135,968	Feb. 18, 1873	536	177	3	195
Hat and coat hook	J. Danner	136,905	Mar. 18, 1873	501	166	3	304
Hat and parcel holder	A. Clarke	136,587	Mar. 11, 1873	227	76	3	273
Hat-block, Expansible	R. Eickemeyer	141,338	July 29, 1873	937	305	4	120
Hat-blocking machine	E. C. Fales	139,133	May 20, 1873	609	191	3	570
Hat-bodies, Forming	J. Wharton	145,262	Dec. 2, 1873	201	69	4	601
Hat-bodies, Machine for felting	J. Bowden and R. Shaw	135,399	Feb. 4, 1873	3	2	3	128
Hat-bodies, Machine for stretching	R. Eickemeyer	135,033	Jan. 21, 1873	505	163	3	76
Hat-brim, Extension	I. Y. Cassiano	140,614	July 8, 1873	250	84	4	40
Hat-brim, Extension	I. Y. Cassiano	140,615	July 8, 1873	251	85	4	40
Hat-conformator	J. J. McKnight	144,855	Nov. 25, 1873	605	206	4	561
Hat-frames, Machine for forming	B. Ertola and A. Caselli	143,814	Oct. 21, 1873	402	134	4	431
Hat-press	R. Eickemeyer	138,871	May 13, 1873	369	115	3	538
Hat-press	R. Eickemeyer	140,335	June 24, 1873	829	{ 263 } 264 265	{ 3 } 3	708
Hat-pressing device	C. M. Osgood	135,577	Feb. 4, 1873	173	55	3	141
Hat-pressing die	J. Desper	139,708	June 10, 1873	253	79	3	645
Hat-pressing die	J. Desper	144,262	Nov. 4, 1873	79	26	4	484
Hat-pressing machine	E. B. Hastings and J. Desper	135,428	Feb. 4, 1873	33	10	3	130
Hat-pressing machinery	D. Brown	140,993	July 22, 1873	602	204	4	85
Hat-rack	N. Clarke	136,032	Feb. 18, 1873	592	195	3	200
Hat-shearing machine	R. Cooke	145,052	Dec. 2, 1873	10	3	4	586
Hat-steaming apparatus	C. W. Banta	140,341	July 1, 1873	6	2	4	8
Hat-stretching machine	R. Eickemeyer	140,903	July 15, 1873	500	{ 168 } 169	{ 4 } 4	68
Hat-stretching machine	R. Eickemeyer	141,337	July 29, 1873	935	305	4	120
Hat-stretching machine	S. Goodman	135,112	Jan. 21, 1873	566	184	3	81
Hat-tip lining	W. H. M. Pye	141,727	Aug. 12, 1873	289	94	4	166
Hat wiring and binding machine	H. A. Whiting	138,459	Apr. 29, 1873	1,105	348	3	488
Hats, Machine for ironing	R. Eickemeyer	145,934	Dec. 30, 1873	831	271	4	699
Hats, Machine for lustering	R. Eickemeyer	141,339	July 29, 1873	939	306	4	120
Hatchet blank, Die for shaping	J. Yerkes	136,479	Mar. 4, 1873	109	36	3	254
Hatch, Self-closing	C. H. Reynolds	135,728	Feb. 11, 1873	317	101	3	164
Hatchway	G. Follett and A. Brummel	139,307	May 27, 1873	783	249	3	592
Hatchway, Closing	E. M. Hackett	140,499	July 1, 1873	133	45	4	19
Hatchway-door, Metallic	T. Hyatt	145,184	Dec. 2, 1873	136	44, 45	4	596
Hatchway-guard	M. J. Hinden	136,161	Feb. 25, 1873	724	234	3	222
Hatchway-guard, Automatic	G. E. Berry and F. C. Pingree	144,432	Nov. 11, 1873	230	77	4	509
Hatchway, Means for closing	J. S. Baldwin	138,984	May 20, 1873	472	149	3	559
Hatchway, Self-closing	W. P. Cherrington	145,626	Dec. 6, 1873	533	{ 174 } 175	{ 4 } 4	653
Hatchway, Self-closing	A. Reid	141,171	July 22, 1873	765	251	4	98
Hatchway, Self-closing	A. B. See	142,738	Sept. 9, 1873	370	124	4	283
Hay and cotton press	W. H. McBurney	138,909	May 13, 1873	399	126	3	540
Hay and cotton press	J. Müller	143,586	Oct. 14, 1873	175	59	4	403
Hay and cotton press	D. A. Nelson	142,718	Sept. 9, 1873	351	118	4	282
Hay and cotton press	P. A. Shearer	135,291	Jan. 28, 1873	745	240	3	107
Hay and cotton press	G. W. Stewart	138,210	Apr. 22, 1873	855	271	3	460
Hay and grain loader	W. J. Webber	141,840	Aug. 12, 1873	392	128	4	174
Hay, Apparatus for elevating and unloading	H. Buck	136,029	Feb. 18, 1873	589	194	3	200
Hay-carrier	E. B. Tanner	138,955	May 13, 1873	436	137	3	544
Hay-elevator	C. H. Kirkpatrick	142,635	Sept. 9, 1873	282	93	4	276
Hay-fork, Horse	G. Atherton	136,016	Feb. 18, 1873	580	191	3	199
Hay-fork, Horse	S. B. Bowen	141,851	Aug. 19, 1873	409	133	4	186
Hay-fork, Horse	L. Haverstick	138,249	Apr. 29, 1873	916	289	3	473
Hay-fork, Horse	J. W. Lowe	143,170	Sept. 23, 1873	739	254	4	335
Hay-fork, Horse	A. J. Nellus	143,775	Oct. 21, 1873	368	122	4	428
Hay-fork, Horse	T. Rhoads	138,286	Apr. 29, 1873	953	300	3	476
Hay-fork, Horse	B. B. Rockwell	144,143	Oct. 28, 1873	703	233	4	466
Hay-fork, Horse	I. E. Snyder	143,192	Sept. 23, 1873	759	262	4	336
Hay-fork, Horse	H. C. Stouffer	138,211	Apr. 22, 1873	857	271	3	460
Hay-grinding machine	W. P. Miller	139,911	June 17, 1873	445	138	3	667
Hay-knife	J. S. Ball	144,591	Nov. 18, 1873	370	125	4	531
Hay-loader	T. P. Davidson and A. Parvis	137,751	Apr. 8, 1873	436	134	3	404
Hay-loader	H. C. Howland and T. L. Moore	142,234	Aug. 26, 1873	766	252	4	224
Hay-loader	C. E. Warner	145,321	Dec. 9, 1873	260	86	4	619

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Hay-loading and elevating apparatus	J. H. Bean	142,836	Sept. 16, 1873	462	157	4	302
Hay-loading and unloading apparatus	G. W. Long	135,729	Feb. 11, 1873	312	99	3	164
Hay-press	H. F. Blank	144,733	Nov. 18, 1873	487	165	4	541
Hay-press, Wagon	H. Brocksmith	145,986	Dec. 30, 1873	878	285	4	703
Hay rake and loader	F. Marion and N. E. Wilson	134,997	Jan. 21, 1873	471	151	3	73
Hay-rake, Horse	A. Amos	144,305	Nov. 4, 1873	169	37	4	487
Hay-rake, Horse	A. Amos	144,306	Nov. 4, 1873	110	37	4	487
Hay-rake, Horse	J. H. Bean	140,671	July 8, 1873	294	99	4	43
Hay-rake, Horse	B. J. Downing	143,278	Sept. 30, 1873	838	288	4	359
Hay-rake, Horse	C. Edgar	142,844	Sept. 16, 1873	469	159	4	302
Hay-rake, Horse	C. N. Goss	135,330	Jan. 28, 1873	781	253	3	110
Hay-rake, Horse	W. H. Hartley	143,572	Oct. 14, 1873	164	55	4	402
Hay-rake, Horse	J. F. Keller	137,212	Mar. 25, 1873	786	259	3	337
Hay-rake, Horse	L. Litchfield and J. S. Corbin	140,513	July 1, 1873	145	50	4	20
Hay-rake, Horse	C. M. Lufkin and C. G. Allen	142,031	Aug. 19, 1873	570	188	4	198
Hay-rake, Horse	W. C. Martindale	140,634	July 8, 1873	264	90	4	41
Hay-fork, Horse	D. C. McDonald	138,572	May 6, 1873	95	30	3	505
Hay-rake, Horse	J. H. Mears	141,370	July 29, 1873	969	315	4	122
Hay-rake, Horse	B. Morse	141,884	Aug. 19, 1873	448	146	4	188
Hay-rake, Horse	R. B. Sheldon	137,389	Apr. 1, 1873	98	32	3	365
Hay-rake, Horse	S. Stevenson	136,785	Mar. 11, 1873	389	{ 128 129 }	{ 3 3 }	286
Hay-rake, Horse	G. Sweet	145,029	Nov. 25, 1873	749	253	4	573
Hay-rake, Horse	J. H. Walker	141,684	Aug. 12, 1873	257	83	4	164
Hay, &c., Sling for loading and unloading	G. W. Long	142,638	Sept. 9, 1873	285	93	4	277
Hay-tedder	T. J. and G. M. Clark	141,999	Aug. 19, 1873	541	178	4	196
Head-band	D. McKinnon	142,169	Aug. 26, 1873	710	235	4	219
Head-block	P. M. Cummings	144,388	Nov. 11, 1873	191	65	4	506
Head-light, Locomotive	J., W. H. and A. E. Briggs	142,204	Aug. 26, 1873	740	244	4	222
Head-light, Locomotive	L. Michaels	138,426	Apr. 29, 1873	1,076	339	3	486
Head-light, Locomotive	P. F. Stout	141,183	July 22, 1873	780	255	4	99
Head-rest	O. M. Mitchell	136,531	Mar. 4, 1873	161	52	3	258
Head-support, Plasterer's	T. T. Wright	138,463	Apr. 29, 1873	1,108	350	3	488
Heat-governor or draft-regulator	F. E. Chatard, jr.	138,736	May 13, 1873	252	78	3	528
Heat-indicator, Distant	J. A. Read	142,727	Sept. 9, 1873	358	121	4	283
Heat-regulator	H. Boyle	142,371	Sept. 2, 1873	44	15, 16	4	246
Heater:							
<i>See</i> Barrel-heater.							
Boiler-heater.							
Car-heater.							
Dish-heater.							
Feed-water heater.							
Fire-engine heater.							
Fire-place heater.							
Flat-iron heater.							
as-heater.							
Hot water and hot air heater.							
Kerosene heater.							
Lamp-heater.							
Peanut-heater.							
Steam-heater.							
Tire-heater.							
Water-heater.							
Heater and blower	W. M. Jackson	142,397	Sept. 2, 1873	69	23	4	248
Heater and filter	L. F. Meunier	140,719	July 8, 1873	335	113	4	47
Heater and filter, Combined	W. T. Bate	137,878	Apr. 15, 1873	548	171	3	426
Heating air and supplying boilers therewith	G. E. Hibbard	145,568	Dec. 16, 1873	485	{ 158 159 }	{ 4 4 }	648
Heating and illuminating apparatus	L. Ruel	144,414	Nov. 11, 1873	212	71	4	507
Heating apparatus	W. C. Baker	144,650	Nov. 18, 1873	423	142	4	535
Heating-furnace	E. W. Crane	137,598	Apr. 8, 1873	295	91	3	392
Heating-furnace	J. G. Porter	139,812	June 10, 1873	349	108	3	652
Heating-furnace, Hot-air flue for	G. R. Barker	141,101	July 22, 1873	699	234	4	93
Heddle-eye opener	J. H. Crowell	139,875	June 17, 1873	412	129	3	665
Hedge-hook	E. S. Turner	139,215	May 20, 1873	685	215	3	576
Hedge-trimmer	S. B. Turner	138,106	Apr. 22, 1873	764	243	3	453
Heel-blank, Machine for compressing and punching	R. C. Lambart	143,914	Oct. 21, 1873	485	{ 163 164 }	{ 4 4 }	438
Heel-blank, Machine for manufacturing boot and shoe	C. W. Glidden	139,382	May 27, 1873	840	269	3	597
Heel, Boot	J. B. Gebhard and C. G. Schwarz	143,688	Oct. 14, 1873	269	89	4	410
Heel, Boot and shoe	L. R. Blake	145,389	Dec. 9, 1873	314	106	4	623
Heel, Boot and shoe	M. Bray	142,203	Aug. 26, 1873	740	243	4	222
Heel-breasting machine	A. B. Jaquith and J. Wolohan	145,061	Dec. 2, 1873	20	7	4	587
Heel-breasting machine	V. K. Spear	139,273	May 27, 1873	753	239	3	589
Heel-breasting machine	V. K. Spear	141,735	Aug. 12, 1873	296	97	4	167
Heel-burnishing machine	E. H. Downing and W. Joint	135,786	Feb. 11, 1873	365	118	3	168
Heel-burnishing machine	C. W. Glidden	143,690	Oct. 14, 1873	270	89	4	411
Heel-burnishing machine	C. W. Glidden	143,507	Oct. 7, 1873	92	32	4	388
Heel-burnishing machine	G. C. Hawkins	145,943	Dec. 16, 1873	842	274	4	700
Heel-burnishing machine	H. S. Vrooman	139,636	June 3, 1873	168	55, 56	3	622
Heel-burnishing machine, Boot and shoe	C. W. Glidden	143,899	Oct. 21, 1873	473	159	4	437
Heel-burnishing machine, Boot and shoe	R. C. Lambart	145,430	Dec. 9, 1873	351	117	4	626
Heel-burnishing machinery, Boot and shoe	J. Beasley	135,259	Jan. 28, 1873	721	230	3	105
Heel-burnishing machinery, Boot and shoe	J. Van Nouhuys	141,678	Aug. 12, 1873	251	80	4	163
Heel for boots and shoes	O. Underwood	144,580	Nov. 11, 1873	352	119	4	518
Heeling boots and gaiters, Machine for	L. Graf	145,645	Dec. 16, 1873	550	181	4	654
Heeling-machine	C. W. Glidden and H. P. Fairfield	139,058	May 20, 1873	537	{ 169 170 }	{ 3 3 }	564
Heeling-machine, Boot and shoe	C. W. Glidden	136,233	Feb. 25, 1873	677	251	3	226
Heel nailing and shaving machine	L. P. Hawkins	135,911	Feb. 18, 1873	492	159	3	192
Heel-plate	H. L. Drake	139,500	June 3, 1873	51	16	3	613
Heel-plate, Boot and shoe	G. Rohr	143,719	Oct. 14, 1873	303	99	4	413
Heel-rand, Machine for turning	J. B. Johnson and G. W. Moulton	138,257	Apr. 29, 1873	925	291	3	474
Heels, Apparatus for manufacturing boot and shoe	J. Blakey	139,859	June 17, 1873	395	{ 123 124 }	{ 3 3 }	664

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Heels for shoes, Machine for finishing wooden.....	R. Hübler.....	135, 038	Jan. 21, 1873	510	{ 164 165	{ 3	76
Heels, Hand-tool for manufacture of.....	S. L. Riker.....	143, 718	Oct. 14, 1873	302	99	4	413
Heels, Machine for cutting leather for boot and shoe..	M. H. Hall.....	145, 647	Dec. 16, 1873	551	181	4	654
Heels, Machine for forming boot.....	C. W. Glidden.....	138, 634	May 6, 1873	147	47	3	509
Heels, Machine for making boot and shoe.....	A. C. McKnight.....	140, 060	June 17, 1873	569	{ 180 181	{ 3	678
Heels, Machine for making boot and shoe.....	A. Knowlton.....	134, 899	Jan. 14, 1873	372	118	3	50
Heels, Machine for pricking and nail-loading boot and shoe.	C. W. Glidden.....	136, 503	Mar. 4, 1873	131	42, 43	3	256
Heels, Machine for shaping the edges of boot and shoe	C. W. Glidden.....	135, 538	Feb. 4, 1873	135	42	3	138
Heels, Machinery for finishing boot and shoe.....	L. P. Hawkins.....	137, 304	Apr. 1, 1873	22	7	3	359
Heels, Machinery for finishing boot and shoe.....	L. P. Hawkins.....	141, 712	Aug. 12, 1873	277	91	4	165
Heels, Manufacture of boot and shoe.....	C. W. Glidden.....	134, 538	Jan. 7, 1873	33	11	3	10
Heels of boots and shoes, Machine for breasting.....	W. C. Butler.....	145, 625	Dec. 16, 1873	532	174	4	652
Heel-stiffener.....	L. C. Crowell.....	134, 736	Jan. 14, 1873	231	74	3	39
Heel-stiffener.....	L. C. Crowell.....	139, 238	May 27, 1873	721	227	3	587
Heel-stiffener.....	I. R. Rogers.....	134, 933	Jan. 14, 1873	402	128	3	52
Heel-stiffener for boots and shoes.....	S. Moore.....	144, 556	Nov. 11, 1873	333	112	4	517
Heel-stiffeners, Machine for making.....	J. Samules.....	145, 017	Nov. 25, 1873	736	248	4	572
Heel-stiffening for boots and shoes.....	F. E. Darrow and O. E. Wait.....	138, 010	Apr. 22, 1873	677	214	3	446
Heel trimming and burnishing machine, Attachment for.	S. H. Hodges.....	136, 916	Mar. 18, 1873	509	168	3	304
Heel-trimming apparatus, Boot and shoe.....	L. Coté.....	137, 293	Apr. 1, 1873	13	4	3	358
Heel-trimming machine.....	C. J. Addy.....	135, 745	Feb. 11, 1873	331	106	3	165
Heel-trimming machine.....	C. C. Ballou.....	142, 980	Sept. 23, 1873	589	200	4	323
Heel-trimming machine.....	E. U. Jones.....	140, 420	July 1, 1873	66	23	4	13
Heel-turning machine, Wooden.....	R. Hübler.....	135, 037	Jan. 21, 1873	509	164	3	76
Hemmer.....	O. L. Brown.....	143, 433	Oct. 7, 1873	33	12	4	383
Hemmer.....	E. S. Yentzer.....	138, 064	Apr. 22, 1873	732	231	3	450
Hemp-brake.....	J. F. Adams.....	144, 301	Nov. 4, 1873	107	36	4	487
Hemp-brake.....	W. S. Lawrence.....	141, 569	Aug. 5, 1873	138	44	4	146
Hemp-brake.....	J. C. Matherly.....	140, 289	June 24, 1873	785	249	3	704
Hemp-machine.....	J. E. Neill.....	143, 179	Sept. 23, 1873	745	257	4	335
Hides and skins, Process for treating.....	W. Maynard.....	136, 082	Feb. 18, 1873	636	.....	3	203
Hides or skins, Apparatus for sweating.....	W. M. Mason.....	145, 436	Dec. 9, 1873	355	119	4	626
High and low water indicator, Combined.....	G. Walton.....	142, 536	Sept. 2, 1873	192	62	4	257
Hitching-strap.....	A. M. Brubaker.....	136, 811	Mar. 18, 1873	425	141	3	298
Hinge.....	S. Bingham.....	134, 969	Jan. 21, 1873	445	142	3	71
Hinge.....	E. Boileau.....	141, 989	Aug. 19, 1873	530	175	4	195
Hinge.....	H. D. Bradley.....	139, 290	May 27, 1873	769	244	3	591
Hinge.....	W. I. Ludlow.....	137, 458	Apr. 1, 1873	160	51	3	370
Hinge.....	P. P. Lynch.....	138, 336	Apr. 29, 1873	996	314	3	479
Hinge.....	H. Manneck.....	143, 704	Oct. 14, 1873	288	94	4	412
Hinge.....	F. Müsler.....	134, 697	Jan. 7, 1873	187	61	3	21
Hinge.....	A. Rankin.....	137, 623	Apr. 8, 1873	314	98	3	394
Hinge.....	A. Wirth.....	142, 315	Aug. 26, 1873	829	275	4	229
Hinge.....	J. W. Wood.....	140, 449	July 1, 1873	88	31	4	15
Hinge and spring, Combined door.....	W. Gilfillan.....	143, 234	Sept. 30, 1873	800	276	4	356
Hinge, Blind.....	O. S. Garretson.....	145, 797	Dec. 23, 1873	691	226	4	677
Hinge, Blind.....	L. Gathman.....	144, 898	Nov. 25, 1873	636	216	4	564
Hinge, Blind.....	A. Huffer.....	136, 061	Feb. 18, 1873	617	203	3	202
Hinge, Butt.....	I. L. Thompson.....	134, 617	Jan. 7, 1873	109	36	3	16
Hinge, Butt.....	S. Van Gilder.....	139, 982	June 17, 1873	499	158	3	672
Hinge, Compound.....	H. Loth.....	140, 930	July 15, 1873	529	177	4	70
Hinge for blinds, Lock.....	T. Clucas, jr.....	142, 679	Sept. 9, 1873	221	107	4	280
Hinge for safe-doors, &c.....	W. F. Stevens.....	145, 973	Dec. 30, 1873	869	281	4	702
Hinge, Gate.....	W. G. Franklin.....	138, 081	Apr. 22, 1873	744	236	3	451
Hinge, Gate.....	W. Hull.....	143, 764	Oct. 21, 1873	359	119	4	428
Hinge, Gate.....	J. H. Stone.....	137, 972	Apr. 15, 1873	628	198	3	432
Hinge, Lock.....	C. B. Clark.....	141, 323	July 29, 1873	919	301	4	119
Hinge, Lock.....	M. C. Lee.....	138, 092	Apr. 22, 1873	754	239	3	452
Hinge, Lounge.....	A. Spiegel.....	142, 957	Sept. 16, 1873	564	191	4	310
Hinge, Pin.....	A. Lyons and I. B. Abrahams.....	138, 418	Apr. 29, 1873	1, 065	335	3	485
Hinge-pivots, Machine for forging solid belted.....	J. J. and L. Crooke.....	142, 774	Sept. 16, 1873	413	139	4	298
Hinge, Safe and vault door.....	H. Gross.....	144, 669	Nov. 18, 1873	433	147	4	536
Hinge, Safe-door.....	J. L. Hall.....	136, 239	Feb. 25, 1873	783	253	3	226
Hinge, Seat.....	M. W. Chase.....	141, 115	July 22, 1873	710	237	4	94
Hinge, Sheet-metal.....	W. H. Hart.....	139, 464	June 3, 1873	19	6	3	610
Hinge, Shutter.....	W. Fosket.....	144, 971	Nov. 25, 1873	696	235	4	569
Hinge, Spring.....	W. Hoar.....	142, 392	Sept. 2, 1873	65	21	4	247
Hinge, Spring.....	S. Joyce.....	142, 855	Sept. 16, 1873	477	163	4	303
Hinge, Spring.....	J. Palmer.....	137, 951	Apr. 15, 1873	609	192	3	431
Hinge, Spring butt.....	H. A. Clark.....	137, 178	Mar. 25, 1873	750	249	3	335
Hinge, Stop.....	G. C. Thomas.....	145, 315	Dec. 9, 1873	254	84	4	618
Hinge, Table.....	E. C. Brinser.....	142, 077	Aug. 26, 1873	632	208	4	213
Hinge, Table.....	W. F. Daly.....	142, 210	Aug. 26, 1873	745	245	4	222
Hinge, Table.....	J. W. Palmer.....	140, 947	July 15, 1873	546	183	4	72
Hinge, Trunk.....	A. M. Darrell.....	136, 040	Feb. 18, 1873	599	197	3	200
Hinge, Wrought-iron blind.....	W. R. Goodrich.....	136, 650	Mar. 11, 1873	278	93	3	277
Hobby-horse.....	J. A. Crandall.....	137, 896	Apr. 15, 1873	563	177	3	427
Hobby-horse.....	J. Reinhart.....	143, 930	Oct. 21, 1873	497	168	4	439
Hobby-horse, Swing.....	J. A. Crandall.....	139, 371	May 27, 1873	828	265	3	596
Hod-elevator.....	E. Harlow.....	140, 195	June 24, 1873	707	223	3	697
Hoe.....	J. M. Baird.....	141, 208	July 29, 1873	905	297	4	118
Hoe.....	H. R. Barnes.....	135, 462	Feb. 4, 1873	66	21	3	132
Hoe.....	H. R. Barnes.....	137, 755	Apr. 15, 1873	443	138	3	417
Hoe.....	N. D. Beecroft.....	136, 020	Feb. 18, 1873	583	192	3	199
Hoe.....	H. Camp.....	135, 076	Jan. 21, 1873	539	175	3	79
Hoe.....	J. H. Gould.....	142, 159	Aug. 26, 1873	703	232	4	219
Hoe.....	M. Johnson.....	136, 733	Mar. 11, 1873	346	114	3	282
Hoe.....	T. B. Lockwood.....	141, 365	July 29, 1873	965	314	4	122
Hoe.....	E. W. McLendon.....	140, 291	June 24, 1873	786	249	3	704
Hoe.....	H. Parkman.....	144, 127	Oct. 28, 1873	690	229	4	465
Hoe and roller, Combined garden.....	E. Blanchard.....	137, 124	Mar. 25, 1873	705	234	3	331

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Hoe, Weeding.....	H. S. Crossland.....	142, 149	Aug. 26, 1873	694	228	4	218
Hog-trap.....	T. Darby.....	141, 633	Aug. 12, 1873	212	67	4	160
Hog-trap.....	A. B. De Vore.....	140, 816	July 15, 1873	426	144	4	62
Hog-scraper, Rotary.....	R. Fyfe.....	140, 409	July 1, 1873	58	21	4	13
Hog-scraper apparatus.....	O. McNeil and P. W. Dalton.....	140, 838	July 15, 1873	441	150	4	63
Hogs, Forceps for snouting.....	G. Stephenson.....	143, 730	Oct. 14, 1873	312	103	4	413
Hogsheads and heavy barrels, Apparatus for moving and rolling.....	F. O. J. Burr.....	136, 486	Mar. 4, 1873	116	38	3	255
Hoisting and conveying apparatus.....	O. T. McIntosh.....	138, 910	May 13, 1873	400	126	3	540
Hoisting and conveying apparatus.....	G. Stanciliff.....	13.....	May 13, 1873	432	136	3	543
Hoisting and conveying apparatus.....	C. B. Stough.....	141, 297	July 29, 1873	895	294	4	117
Hoisting-apparatus.....	J. N. B. Bond.....	135, 513	Feb. 4, 1873	107	34	3	136
Hoisting-apparatus.....	C. Clark.....	136, 212	Feb. 25, 1873	762	246	3	225
Hoisting-apparatus.....	F. Farrell.....	141, 551	Aug. 5, 1873	122	38	4	145
Hoisting-apparatus.....	J. L. Isbell.....	138, 655	May 6, 1873	166	53	3	511
Hoisting-apparatus.....	D. Knowles.....	140, 421	July 1, 1873	66	24	4	13
Hoisting-apparatus.....	G. B. Massey.....	143, 518	Oct. 7, 1873	100	35	4	389
Hoisting-apparatus.....	G. B. Massey.....	143, 519	Oct. 7, 1873	102	35	4	389
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Hoisting-apparatus.....	C. R. Otis.....	146, 090	Dec. 30, 1873	968	{ 312 313 }	{ 4 4 }	710
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Hoisting-apparatus for mines, Swivel.....	T. M. Martin.....	136, 661	Mar. 11, 1873	287	96	3	277
Hoisting-apparatus, Hydraulic.....	P. Hinkle.....	140, 502	July 1, 1873	136	47	4	19
Hoisting-apparatus, Portable and adjustable.....	G. A. Myers.....	140, 427	July 1, 1873	70	25	4	14
Hoisting-apparatus, Steam.....	J. Beggs.....	141, 197	July 29, 1873	800	262	4	109
Hoisting-apparatus, Steam.....	C. R. and N. P. Otis.....	134, 699	Jan. 7, 1873	189	61	3	21
Hoisting-engine.....	F. Murgatroyd.....	144, 217	Nov. 4, 1873	42	12	4	481
Hoisting-jack.....	J. H. Churchill.....	141, 919	Aug. 19, 1873	475	156	4	191
Hoisting-machine.....	J. Darling.....	145, 727	Dec. 23, 1873	632	207	4	673
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Hoisting-machine.....	P. W. Mellen.....	140, 786	July 15, 1873	395	135	4	60
Hoisting-machine.....	S. Reynolds.....	139, 614	June 3, 1873	148	49	3	621
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Hoisting-machine.....	J. M. Yates.....	143, 214	Sept. 23, 1873	777	268	4	338
Hoisting-machine, Brake-clutch for.....	T. A. Weston.....	134, 958	Jan. 14, 1873	423	135	3	54
Hoisting-machine safety-attachment.....	W. D. Andrews.....	137, 165	Mar. 25, 1873	737	245	3	334
Hoisting-whim.....	J. C. Marshall.....	138, 811	May 13, 1873	317	98	3	533
Holdback.....	G. D. Cleaveland.....	143, 964	Oct. 28, 1873	549	182	4	453
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Billiard-table ball-holder.							
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Blacking-box holder.							
Boquet-holder.							
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Brush and mop holder.							
Button-holder.							
Cartridge-holder.							
Cigar-holder.							
Clothes-line holder.							
Coil-holder.							
Comb-holder.							
Copy-holder.							
Cork or stopper holder.							
Crayon-holder.							
Cuff-holder.							
Currency and postage-stamp holder.							
Curtain-roller holder.							
File-holder.							
Gimlet-holder.							
Globe-holder.							
Hat and parcel holder.							
Hose-holder.							
Knitting-holder.							
Lamp-shade holder.							
Last-block holder.							
Mail-pouch holder.							
Meat-holder.							
Mirror-holder.							
Mop-holder.							
Napkin-holder.							
Pen-holder.							
Pencil-holder.							
Photographic-plate holder.							
Portfolio-holder.							
Rein-holder.							
Ruche-holder.							
Sad-iron holder.							
Sash-holder.							
Scythe-holder.							
Scythe-stone holder.							
Sewing-machine cloth-holder.							
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Shade-holder.							
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Hominy-mill	J. L. Toner	144, 486	Nov. 11, 1873	273	92	4	512
Honey from the comb, Centrifugal apparatus for extracting.	W. Probasco	134, 561	Jan. 7, 1873	56	17	3	11
Hoof paring-machine, Horse	G. W. Schafer	138, 101	Apr. 22, 1873	761	242	3	453
Hoof-spreader	T. Armstrong	136, 689	Mar. 11, 1873	309	102	3	279
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Curtain-hook.							
Fish-hook.							
Harness-check hook.							
Hat and coat hook.							
Hedge-hook.							
Needle-threading hook.							
Pocket-hook.							
Pruning-hook.							
Security-hook.							
Sewing-machine cover-hook.							
Siding-hook.							
Snap-hook.							
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Hook	R. Weiss	136, 114	Feb. 18, 1873	665	217	3	205
Hook and hasp, Combined	B. H. Brooks	141, 691	Aug. 12, 1873	262	84	4	164
Hoop:							
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Cheese-hoop.							
Hoop-bending machine	E. Coapman	145, 398	Dec. 9, 1873	322	109	4	624
Hoop-cutting machine	A. G. Parkhurst	137, 384	Apr. 1, 1873	92	30	3	364
Hoop-cutting machine	P. Welch	141, 246	July 29, 1873	852	278	4	113
Hoop cutting and bending machine	J. Dobbins	135, 413	Feb. 4, 1873	18	6	3	129
Hoop-dressing machine	S. L. Heywood	139, 387	May 27, 1873	846	270	3	597
Hoop-lock	T. E. Lucas	144, 117	Oct. 28, 1873	681	225	4	464
Hoop-lock cutter	J. G. Loggins and P. P. Wilkins	145, 956	Dec. 30, 1873	853	277	4	701
Hoop-lock, Machine for cutting	J. McGrew	139, 594	June 3, 1873	129	43	3	619
Hoop-shaving machine	J. A. Douglass and J. Wagner	135, 637	Feb. 11, 1873	239	75	3	158
Hoop-skirt	W. Coe	145, 845	Dec. 23, 1873	731	239	4	681
Hoop-skirt	G. H. Lockwood and A. Carter	139, 510	June 3, 1873	58	19	3	613
Hoop-skirt tape	C. C. Carpenter	141, 112	July 22, 1873	708	237	4	94
Horn to resemble whalebone, Treating	W. Birch	145, 045	Dec. 2, 1873	3		4	586
Horse, Apparatus for treating	D. Sullivan	139, 207	May 20, 1873	679	213	3	576
Horse-checking apparatus	J. Jackson	143, 244	Sept. 30, 1873	810	278	4	356
Horse-cleaning apparatus	O. W. Allison and P. Homelius	137, 045	Mar. 25, 1873	631	209	3	326
Horse-cover	A. H. Morris	134, 921	Jan. 14, 1873	392	125	3	51
Horse-detaching apparatus	H. Latshaw	139, 068	May 20, 1873	550	173	3	565
Horse-detaching device	E. P. Jones	145, 426	Dec. 9, 1873	348	116	4	625
Horse-detaching device	R. R. Jones	143, 286	Sept. 30, 1873	843	290	4	360
Horse-detaching device	I. L. Landis	145, 662	Dec. 16, 1873	563	185	4	655
Horse-detaching device	S. Sykes	143, 428	Oct. 7, 1873	29	11	4	383
Horse-feed bag	T. Adams	141, 686	Aug. 12, 1873	259	83	4	164
Horse foot-pad	J. Johnson	135, 814	Feb. 11, 1873	400	128	3	170
Horse from cart, Device for releasing	G. H. Meirer	140, 521	July 1, 1873	153	52	4	21
Horse from cribbing, Device for preventing	A. Stillwell	141, 962	Aug. 19, 1873	508	167	4	193
Horse from vehicle, Apparatus for detaching	T. Y. Vancleave	135, 177	Jan. 21, 1873	620	202	3	85
Horse from vehicle, Device for detaching	J. McNeill	139, 803	June 10, 1873	341	106	3	652
Horse nose-bag	H. D. McGovern	140, 058	June 17, 1873	567	179	3	678
Horse-power	E. Crockett	137, 294	Apr. 1, 1873	13	4	3	358
Horse-power	G. M. Branch	136, 899	Mar. 18, 1873	497	164	3	303
Horse-power	L. H. Bratt	134, 510	Jan. 7, 1873	9	3	3	8
Horse-power	L. Bronson	134, 511	Jan. 7, 1873	9	4	3	8
Horse-power	W. P. Emerson	138, 873	May 13, 1873	372	116	3	538
Horse-power	L. R. Faught	143, 974	Oct. 28, 1873	559	186	4	454
Horse-power	W. Gilfillan	140, 622	July 8, 1873	256	86, 87	4	40
Horse power	A. G. Hagerstrom	135, 331	Jan. 28, 1873	782	253	3	110
Horse-power	H. M. Irwin	137, 684	Apr. 8, 1873	368	114	3	398
Horse-power	Z. P. Landrum	136, 075	Feb. 18, 1873	661	207	3	203
Horse-power	Z. P. Landrum	141, 363	July 29, 1873	964	314	4	122
Horse-power	H. I. Marnette	139, 682	June 10, 1873	222	71	3	643
Horse-power	E. G. McMillan	142, 115	Aug. 26, 1873	667	219	4	216
Horse-power	J. Milbourn	139, 725	June 10, 1873	270	84	3	647
Horse-power	J. Müller	135, 439	Feb. 4, 1873	43	13	3	131
Horse-power	J. Nichols and E. D. Brown	136, 754	Mar. 11, 1873	364	120	3	283
Horse-power	J. S. Tadlock	144, 040	Oct. 28, 1873	617	204	4	459
Horse-power	A. G. Waterhouse	138, 108	Apr. 22, 1873	766	244	3	453
Horse-power	D. Woodbury	145, 473	Dec. 9, 1873	387	128	4	628
Horse-power, Link of endless-chain for	A. W. Gray	141, 268	July 29, 1873	873	286	4	115

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Horse-rake and tedder, Combined.....	G. L. Ives.....	135,276	Jan. 28, 1873	734	236	3	107
Horse-rake, Revolving.....	M. K. Flory.....	143,684	Oct. 14, 1873	265	88	4	410
Horse-rake, Revolving.....	G. Penisten, sr.....	142,581	Sept. 9, 1873	240	78	4	273
Horse-rake, Revolving.....	W. Wells.....	137,987	Apr. 15, 1873	641	202	3	433
Horse, Safety-check for.....	J. W. Domett.....	135,208	Jan. 28, 1873	670	216	3	102
Horses from crowding, Device for preventing.....	O. C. Ross.....	141,386	July 29, 1873	985	320	4	123
Horse-shearing apparatus.....	W. Harrison.....	136,993	Mar. 18, 1873	574	191	3	310
Horse, Sun-bonnet for.....	J. Anderson.....	139,491	June 3, 1873	44	14	3	612
Horse, Sun-shade for.....	S. Ruth.....	134,564	Jan. 7, 1873	58	18	3	11
Horse, Suspender for fly-guard upon.....	G. Shelton.....	138,205	Apr. 22, 1873	851	270	3	460
Horse-trough, &c., Float-valve for.....	J. Jonson.....	138,659	May 6, 1873	170	54	3	511
Horses, Harness-attachment for hitching and unhitching.....	T. J. Dobbs.....	143,678	Oct. 14, 1873	258	86	4	410
Horses, Heel-boot for.....	W. Mathis.....	144,782	Nov. 18, 1873	529	180	4	544
Horseshoe.....	M. C. Clark.....	137,891	Apr. 15, 1873	559	175	3	427
Horseshoe.....	R. F. Cooke.....	144,833	Nov. 25, 1873	583	199	4	559
Horseshoe.....	I. De Mott.....	137,128	Mar. 25, 1873	707	234	3	332
Horseshoe.....	C. Goodenough.....	142,097	Aug. 26, 1873	652	214	4	215
Horseshoe.....	J. B. Johnson.....	143,353	Sept. 30, 1873	908	309	4	364
Horseshoe.....	R. K. Jordan.....	145,108	Dec. 2, 1873	62	20	4	590
Horseshoe.....	A. Leach.....	141,509	Aug. 5, 1873	89	27	4	142
Horseshoe.....	J. Rowe, jr., and F. B. Brown.....	142,282	Aug. 26, 1873	803	266	4	227
Horseshoe.....	A. W. Smith.....	142,590	Sept. 9, 1873	248	81	4	274
Horseshoe.....	U. Snyder.....	144,483	Nov. 11, 1873	270	91	4	512
Horseshoe.....	G. H. Todd.....	145,463	Dec. 9, 1873	377	124	4	628
Horseshoe-attachment.....	P. H. O'Neill.....	137,794	Apr. 15, 1873	479	150	3	420
Horseshoe-calk.....	T. M. Clark.....	135,081	Jan. 21, 1873	542	176	3	79
Horseshoe-calk.....	G. Custer.....	138,618	May 6, 1873	131	43	3	508
Horseshoe-calk.....	J. J. Mervesp.....	136,379	Mar. 4, 1873	25	8	3	247
Horseshoe-calk, Machine for grinding.....	J. Little.....	137,852	Apr. 15, 1873	529	165	3	424
Horseshoe interfering-attachment.....	H. S. Davis.....	137,660	Apr. 8, 1873	349	108	3	397
Horseshoe-machine.....	C. H. Perkins.....	143,782	Oct. 21, 1873	375	124	4	429
Horseshoe-nail forging-machine.....	F. H. Richards.....	142,044	Aug. 19, 1873	586	192	4	199
Horseshoe-nail machine.....	A. D. Bingham.....	134,841	Jan. 14, 1873	322	103	3	46
Horseshoe-nail machine.....	A. H. Caryl.....	142,437	Sept. 2, 1873	100	33	4	250
Horseshoe-nail machine.....	J. M. Laughlin.....	135,993	Feb. 18, 1873	558	185	3	197
Horseshoe-nail machine.....	J. Mills.....	135,140	Jan. 21, 1873	592	192	3	83
Horseshoe-nails from plates, Die for punching.....	A. H. Caryl.....	142,678	Sept. 7, 1873	320	106	4	280
Horseshoe-nails, Hammer-roll device for forming.....	T. Harris and P. Dunn.....	134,664	Jan. 7, 1873	158	52	3	19
Horseshoe-nails, Machine for feeding.....	S. S. Putnam.....	144,226	Nov. 4, 1873	48	15	4	482
Horseshoe-nails, Machine for finishing.....	S. S. Putnam.....	144,922	Nov. 25, 1873	656	222	4	565
Horseshoe-nails, Machine for finishing.....	R. Ross.....	139,331	May 27, 1873	797	254	3	593
Horseshoe-nails, Machine for finishing.....	R. Ross.....	142,352	Sept. 2, 1873	27	10	4	244
Horseshoe-nails, Machine for making.....	E. W. Kelley.....	139,250	May 27, 1873	731	231	3	588
Horseshoe-nails, Machine for swaging and trimming the point of.....	R. Ross.....	139,332	May 27, 1873	798	255	3	593
Horseshoe-nails, Manufacture of.....	H. D. Cowles.....	137,762	Apr. 15, 1873	452	141	3	418
Horseshoe-nails, Manufacture of.....	H. D. Cowles.....	145,336	Dec. 9, 1873	272	91	4	620
Horseshoe-nails, Manufacture of.....	J. C. Paige.....	142,506	Sept. 2, 1873	166	54	4	255
Horseshoe-nails, Manufacture of.....	D. Turbayne and G. M. Wyman.....	134,948	Jan. 14, 1873	415	133	3	53
Horseshoe-nails, Manufacture of.....	D. Turbayne.....	142,597	Sept. 9, 1873	253	83	4	274
Horseshoe-nails, Roll for rolling iron for.....	J. Huggett and J. A. Hugget.....	138,499	May 6, 1873	26	9	3	500
Horseshoe, Sectional.....	J. D. Abbott.....	142,547	Sept. 9, 1873	211	69	4	271
Horseshoe, Swage for forming.....	D. F. Hofstatter and W. H. Shaw.....	137,923	Apr. 15, 1873	587	185	3	429
Horseshoeing-machine.....	C. H. Perkins.....	143,781	Oct. 21, 1873	374	124	4	429
Horseshoer's rest.....	J. Legg.....	141,651	Aug. 12, 1873	227	71	4	161
Hose and pipe coupling.....	T. E. Button.....	137,823	Apr. 15, 1873	503	157	3	422
Hose, Apparatus for oiling, testing, and washing fire-engine.....	P. Noyes.....	141,885	Aug. 19, 1873	449	146	4	188
Hose-bridge.....	E. Batzel.....	143,400	Oct. 7, 1873	3	1	4	381
Hose-bridge.....	J. E. McCaullay.....	136,745	Mar. 11, 1873	357	118	3	283
Hose-bridge.....	G. J. Orr and C. E. Gildersleeve.....	135,285	Jan. 28, 1873	741	239	3	107
Hose-coupling.....	J. Edson.....	145,731	Dec. 23, 1873	636	208	4	673
Hose-coupling.....	G. S. Goble.....	142,388	Sept. 2, 1873	62	20	4	247
Hose-coupling.....	S. Ingersoll.....	140,830	July 15, 1873	436	148	4	63
Hose-coupling.....	J. W. Kennedy.....	140,374	July 1, 1873	33	11	4	11
Hose-coupling.....	J. W. Kennedy.....	141,718	Aug. 12, 1873	282	92	4	166
Hose-coupling.....	W. Kilburn.....	143,514	Oct. 7, 1873	97	97	4	388
Hose-coupling.....	H. Lewis.....	136,328	Feb. 25, 1873	862	278	3	233
Hose-coupling.....	T. J. Mayall.....	145,997	Nov. 25, 1873	719	243	4	571
Hose-coupling.....	I. J. Trapp.....	139,632	June 3, 1873	160	54	3	622
Hose-coupling.....	G. Westinghouse, jr.....	136,397	Mar. 4, 1873	40	14	3	249
Hose-coupling.....	I. Wilson and L. B. Kendall.....	139,223	May 20, 1873	691	217	3	577
Hose-coupling, Metallic.....	E. S. Elmer.....	139,459	June 3, 1873	15	5	3	610
Hose-coupling spanner.....	L. Pond.....	144,862	Nov. 25, 1873	612	208	4	561
Hose, Flexible play-pipe for.....	J. Greacen.....	145,415	Dec. 9, 1873	338	113	4	625
Hose holder, Garden.....	H. C. Smith.....	137,802	Apr. 15, 1873	487	152	3	421
Hose, Hydraulic.....	L. R. Blake.....	138,845	May 13, 1873	349	108	3	536
Hose, Hydraulic.....	L. R. Blake.....	143,661	Oct. 14, 1873	240	81	4	408
Hose, Hydraulic.....	L. H. Downing.....	138,867	May 13, 1873	266	114	3	537
Hose, Machine for manufacture of.....	T. J. Mayall.....	140,934	July 15, 1873	533	178	4	71
Hose, Manufacture of hydraulic.....	E. A. Street.....	142,054	Aug. 19, 1873	597	196	4	200
Hose-pipe and sprinkler.....	W. W. Ransom.....	137,095	Mar. 25, 1873	677	225	3	329
Hose-pipe, Compound.....	M. Cronin.....	139,550	June 3, 1873	91	31	3	616
Hose-reel.....	T. J. Mayall.....	140,784	July 15, 1873	393	135	4	60
Hose rest, Garden.....	C. Ryder.....	144,415	Nov. 11, 1873	213	71	4	507
Hose, Sleeve or patch for stopping leaks in.....	J. F. Bellemere and F. R. Fleer.....	141,536	Aug. 5, 1873	109	34	4	144
Hose, Suction.....	W. C. Downs.....	134,654	Jan. 7, 1873	145	46	3	18
Hose, syringe, &c., Distributing-apparatus for garden.....	S. Barton, jr.....	141,620	Aug. 12, 1873	201	63	4	159
Hose-wrench.....	E. Bucklin, jr.....	144,827	Nov. 25, 1873	578	197	4	559
Hosiery, Pressing.....	O. Osborne.....	140,068	June 17, 1873	578	183	3	679

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Hot-air furnace.....	G. W. Day	145,489	Dec. 16, 1873	409	134	4	642
Hot-air furnace.....	J. Fridley, jr.	135,422	Feb. 4, 1873	27	8	3	129
Hot-air furnace.....	W. B. Geddes	134,879	Jan. 14, 1873	354	{ 112 113 }	{ 3 }	48
Hot-air furnace.....	S. F. Gold	137,546	Apr. 8, 1873	250	77	3	389
Hot-air furnace.....	W. O. Grover	139,505	June 3, 1873	54	17	3	613
Hot-air furnace.....	J. D. Hall	137,838	Apr. 15, 1873	518	161	3	423
Hot-air furnace.....	O. S. Kelsey	143,453	Oct. 7, 1873	47	16, 17	4	384
Hot-air furnace.....	H. N. Longfellow	135,227	Jan. 28, 1873	690	222	3	103
Hot-air furnace.....	J. Magee	145,512	Dec. 16, 1873	437	{ 142 143 }	{ 4 }	644
Hot-air furnace.....	J. Magee	145,513	Dec. 16, 1873	438	143	4	644
Hot-air furnace.....	G. H. Miller	140,523	July 1, 1873	154	53	4	21
Hot-air furnace.....	D. B. Montague	135,003	Jan. 21, 1873	477	153	3	73
Hot-air furnace.....	D. B. Morris	146,089	Dec. 30, 1873	967	312	4	710
Hot-air furnace.....	H. L. Palmer	135,838	Feb. 11, 1873	417	135	3	172
Hot-air furnace.....	A. Pfund	144,355	Nov. 4, 1873	153	51	4	491
Hot-air furnace.....	C. L. Pierce	138,188	Apr. 22, 1873	839	265	3	459
Hot-air furnace.....	C. L. Pierce	138,189	Apr. 22, 1873	840	265	3	459
Hot-air furnace.....	B. C. Sayre	137,800	Apr. 15, 1873	485	151	3	421
Hot-air furnace.....	M. D. Seward	137,727	Apr. 8, 1873	411	126	3	402
Hot-air furnace.....	C. J. Shepard	143,851	Oct. 21, 1873	437	145	4	434
Hot-air furnace.....	T. Yates	137,277	Mar. 25, 1873	841	276	3	342
Hot-air register.....	W. Highton	144,616	Nov. 18, 1873	390	131	4	533
Hot-air register.....	E. A. Tuttle	136,682	Mar. 11, 1873	304	101	3	279
Hot-water and hot-air heater, Apparatus for automatic control of combustion in.	J. C. Wightman and J. H. Mills ..	138,547	May 6, 1873	71	24	3	503
House:							
See Fire-engine house.							
Light-house.							
Tobacco-drying house.							
Houses, Construction of.....	O. C. Campbell	136,583	Mar. 11, 1873	223	74, 75	3	272
Houses, Construction of.....	D. L. Emerson	137,833	Apr. 15, 1873	512	160	3	423
Houses, Construction of.....	T. W. H. Moseley	140,941	July 15, 1873	541	{ 180 181 }	{ 4 }	71
Houses, Construction of.....	T. W. H. Moseley	140,942	July 15, 1873	542	{ 181 182 }	{ 4 }	71
Houses, Construction of.....	W. Ward	143,946	Oct. 21, 1873	512	172	4	440
Hub and axle, Vehicle.....	M. Chapin	135,689	Feb. 11, 1873	287	90	3	162
Hub band, Roll for rolling wagon.....	J. Glass	141,641	Aug. 12, 1873	217	69	4	161
Hub-band for vehicle-wheel.....	G. H. Johnson	139,317	May 27, 1873	789	251	3	592
Hub-boring machine.....	E. Caswell	141,425	Aug. 5, 1873	14	3	4	136
Hub-boring machine.....	J. Duncan and W. H. Arnold	141,264	July 29, 1873	870	285	4	115
Hub-boring machine.....	J. Eisenmann	138,742	May 13, 1873	257	80	3	528
Hub-boring machine.....	F. Jonas	144,618	Nov. 18, 1873	392	132	4	533
Hub-boring machine.....	J. A. Newell	145,521	Dec. 16, 1873	445	145	4	645
Hub-boring machine.....	W. S. Owen	145,894	Dec. 23, 1873	776	253	4	684
Hub-boring machine.....	D. B. Wright	145,142	Dec. 2, 1873	97	32	4	593
Hub, Carriage-wheel.....	P. Murphy	141,659	Aug. 12, 1873	234	73	4	162
Hub, Heavy-wheeled vehicle.....	J. J. Anderson	137,874	Apr. 15, 1873	545	170	3	425
Hub to axle, Device for attaching.....	O. F. Shepard	140,389	July 1, 1873	46	15	4	12
Hub to shaft, Mode of securing wheel.....	E. Sanford	143,849	Oct. 21, 1873	436	145	4	434
Hub, Vehicle.....	H. M. DuBois	135,470	Feb. 4, 1873	71	22	3	133
Hub, Vehicle.....	S. McGee	135,570	Feb. 4, 1873	163	53	3	140
Hub, Vehicle.....	G. L. Rouse	139,691	June 10, 1873	232	74	3	644
Hub, Vehicle.....	T. Royer and G. L. Rouse	136,459	Mar. 4, 1873	89	31	3	253
Hub, Vehicle.....	S. T. F. Sterick	134,945	Jan. 14, 1873	412	132	3	53
Hub, Vehicle-wheel.....	J. Monk	137,314	Apr. 1, 1873	32	10	3	359
Huller:							
See Rice-huller.							
Hulling-machine.....	A. Bertelson	139,758	June 10, 1873	301	93	3	649
Hydrant.....	W. H. Graham	145,294	Dec. 9, 1873	234	79	4	617
Hydrant.....	J. V. Hayes	138,562	May 6, 1873	86	27	3	504
Hydrant.....	F. J. Paul	137,476	Apr. 1, 1873	177	56	3	372
Hydrant.....	T. Ragan	136,545	Mar. 4, 1873	176	56	3	259
Hydrant.....	T. Van Kannel and G. Elzenhoefer ..	145,768	Dec. 23, 1873	669	218	4	676
Hydrant and fire-plug.....	J. I. Healey	139,890	June 17, 1873	426	133	3	666
Hydraulic-elevator.....	T. Stebins	139,624	June 3, 1873	155	52	3	621
Hydraulic-engine.....	R. F. Dobson	134,651	Jan. 7, 1873	143	46	3	18
Hydraulic-engine.....	J. C. Hodges	134,806	Jan. 14, 1873	292	94	3	43
Hydraulic-jack.....	R. Dudgeon	137,765	Apr. 15, 1873	454	{ 141 142 }	{ 3 }	418
Hydraulic-jack.....	A. V. Ojeda	141,232	July 29, 1873	837	273	4	112
Hydraulic-motor.....	B. A. Bloch	137,171	Mar. 25, 1873	744	247	3	334
Hydraulic-motor.....	W. Walter	142,183	Aug. 26, 1873	721	238	4	220
Hydraulic-motor, Organ-lever coupling for.....	H. F. Wheeler	138,546	May 6, 1873	70	23	3	503
Hydraulic-wheel press.....	G. A. Gray, jr.	138,393	Apr. 29, 1873	1,042	328	3	483
Hydrocarbon-burning apparatus.....	E. F. Rogers	135,011	Jan. 21, 1873	484	155	3	74
Hydrocarbons, Apparatus for burning.....	M. Carbonel	140,009	June 17, 1873	519	165	3	674
Hydrocarbons, Apparatus for burning.....	C. H. Cushing	144,660	Nov. 18, 1873	428	144	4	536
Hydrocarbon vapor, Combustion-chamber for burning.....	C. J. Eames	137,132	Mar. 25, 1873	710	235	3	332
Hydrocarbon vapor generating and burning device.....	C. Carpenter, jr.	143,061	Sept. 23, 1873	659	226	4	328
Hygienic basin and steam-bath.....	E. O. Murden	135,004	Jan. 21, 1873	479	154	3	74
I.							
Ice, Apparatus for making.....	G. Willard	137,523	Apr. 1, 1873	224	69	3	375
Ice breaker and fender.....	F. Ford	143,003	Sept. 23, 1873	608	206	4	324
Ice, cooling buildings, &c., Apparatus for manufacture of.....	A. H. Tait	144,577	Nov. 11, 1873	350	118	4	518
Ice-cream freezer.....	R. P. Bell	144,053	Oct. 28, 1873	630	208	4	460
Ice-cream freezer.....	H. B. Campbell	139,453	June 3, 1873	6	2	3	609
Ice-cream freezer.....	J. Dooling	141,209	July 29, 1873	813	266	4	110
Ice-cream freezer.....	S. S. Fitch	136,496	Mar. 4, 1873	125	40	3	255
Ice-cream freezer.....	M. F. Graves	143,822	Oct. 21, 1873	408	136	4	431
Ice-cream freezer.....	G. Guinot	135,474	Feb. 4, 1873	74	23	3	133
Ice-cream freezer.....	A. Lucetti	141,060	July 22, 1873	658	222	4	90
Ice-cream freezer.....	C. E. Simmons	142,951	Sept. 16, 1873	559	189	4	310

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Ice-cream freezer	E. B. Tilden	141, 738	Aug. 12, 1873	298	98	4	167
Ice-cream, jelly, &c., Mold for	E. M. May	141, 882	Aug. 19, 1873	446	145	4	188
Ice-creeper	E. B. Colby	135, 629	Feb. 11, 1873	232	73	3	158
Ice-creeper	R. H. Earle	145, 340	Dec. 9, 1873	275	92	4	620
Ice-creeper	A. Heulings	139, 506	June 3, 1873	55	18	3	613
Ice-creeper	C. H. Johnson and W. Axford	145, 656	Dec. 16, 1873	558	183	4	655
Ice-crusher	M. J. Dixon and W. Tunstill	140, 019	June 17, 1873	531	168	3	675
Ice-crusher	F. Hudner and J. R. Little	135, 556	Feb. 4, 1873	150	48	3	139
Ice-elevating track	A. Pfund	144, 133	Oct. 28, 1873	694	230	4	465
Ice-elevator	E. E. Conklin	140, 187	June 24, 1873	701	220 221	3	697
Ice from water or gas pipe, Device for thawing	O. R. Mason	142, 488	Sept. 2, 1873	152	49	4	254
Ice-house	A. Wilbur	144, 720	Nov. 18, 1873	476	161	4	540
Ice-machine	W. Bray	145, 838	Dec. 23, 1873	722	238	4	680
Ice-machine	H. Norman and C. F. Dietrich	135, 576	Feb. 4, 1873	169	54, 55	3	141
Ice-pick	S. S. Boynton and D. Keefe	143, 957	Oct. 28, 1873	544	180	4	453
Ice-shaving machine	J. D. Freeman	141, 553	Aug. 5, 1873	124	39	4	145
Index, Case for containing	C. E. Fellows	139, 503	June 3, 1873	52	17	3	613
India-rubber, Process of obtaining gum resembling	E. H. Rogers	136, 765	Mar. 11, 1873	372	.....	3	284
India-rubber ring, Manufacture of	W. H. Collins and C. E. Longden	140, 472	July 1, 1873	110	37	4	17
India-rubber spring	A. Magowan	136, 079	Feb. 18, 1873	633	208	3	203
Indicator:							
<i>See</i> Car-indicator.							
Fire-indicator.							
Gas-light and pressure indicator.							
Heat-indicator.							
High and low water indicator.							
Low-water indicator.							
Privy-indicator.							
Railway-train indicator.							
Station-indicator.							
Water-indicator.							
Indicator and safety-valve, Combined	J. Smith	143, 644	Oct. 14, 1873	226	76	4	407
Indicator-lock	E. A. Cooper	137, 181	Mar. 25, 1873	753	249	3	335
Indigo-blue vat for coloring wool and cotton	G. Molt	134, 694	Jan. 7, 1873	185	.....	3	21
Indigo for dyeing and printing, Preparation of	P. Schutzenberger and F. de Lande	136, 770	Mar. 11, 1873	375	.....	3	284
Ingot-mold	N. Churchman	145, 278	Dec. 9, 1873	219	75	4	615
Ingot-mold	M. T. Mooney	145, 677	Dec. 16, 1873	577	189	4	656
Ingot mold, Adjustable	M. S. Drake	136, 821	Mar. 18, 1873	433	143	3	298
Ingot-mold, Gold or silver	J. Feix	144, 605	Nov. 18, 1873	380	128	4	532
Ingots, Casting steel	J. A. Holmes	141, 506	Aug. 5, 1873	85	27	4	142
Ingots, Working scrap-iron or other metals into	D. D. Parmelee	146, 092	Dec. 30, 1873	971	314	4	710
Inhaler	W. R. Crumb	134, 858	Jan. 14, 1873	336	107	3	47
Inhaler	W. H. Cutler	135, 411	Feb. 4, 1873	17	5	3	129
Inhaler	C. D. Hunter and E. S. Woods	138, 253	Apr. 29, 1873	921	290	3	474
Inhaler	C. D. Hunter and E. S. Woods	140, 828	July 15, 1873	434	148	4	63
Inhaler	S. J. Shaw	141, 175	July 22, 1873	773	252	4	99
Inhaler and nasal-douche, Combined	E. Schofield	135, 372	Jan. 28, 1873	820	265	3	113
Inhaler, Medical	N. I. Donaldson	134, 861	Jan. 14, 1873	339	108	3	47
Inhaler, Medical	J. C. Parkinson	145, 679	Dec. 16, 1873	578	190	4	656
Inhaling apparatus	E. Schofield	145, 758	Dec. 23, 1873	661	216	4	675
Injector	S. Rue	145, 969	Dec. 30, 1873	866	281	4	702
Injector for feeding boilers	W. and C. Sellers	141, 174	July 22, 1873	769	252	4	99
Injector for feeding boilers, Self-adjusting	W. Sellers	141, 173	July 22, 1873	767	252	4	99
Injector for steam-generators	S. Rue, jr.	138, 198	Apr. 22, 1873	846	268	3	459
Injector for steam-generators	S. Rue, jr.	138, 199	Apr. 22, 1873	847	268	3	459
Injector, Steam	S. and J. Benson	137, 651	Apr. 8, 1873	338	105	3	396
Injectors, Feed-regulator for	J. A. Marden and T. S. Smith	143, 988	Oct. 28, 1873	571	190	4	455
Ink for stamping purposes	J. B. Jud	140, 782	July 15, 1873	392	.....	4	59
Ink-pad	H. R. Towne and W. H. Taylor	135, 949	Feb. 18, 1873	522	171	3	194
Inking apparatus	F. L. Bailey	143, 489	Oct. 7, 1873	77	26	4	387
Inking apparatus	G. P. Gordon	142, 457	Sept. 2, 1873	120	38	4	252
Inking apparatus	I. Hart	144, 673	Nov. 18, 1873	437	148	4	537
Inking-pad	J. A. Miles	135, 043	Jan. 21, 1873	514	166	3	76
Inkstand	S. W. Baldwin	134, 836	Jan. 14, 1873	319	102	3	45
Inkstand	W. M. Brooke	134, 587	Jan. 7, 1873	82	26	3	13
Inkstand	B. Brower	144, 825	Nov. 25, 1873	577	196	4	558
Inkstand	S. Hawson and T. Sweeney	137, 548	Apr. 8, 1873	252	77	3	389
Inkstand	A. D. Judd	145, 352	Dec. 9, 1873	285	95	4	621
Inkstand	J. H. Kidder and G. E. Hood	136, 070	Feb. 18, 1873	627	206	3	202
Inkstand	W. Read, jr.	139, 261	May 27, 1873	740	235	3	588
Inkstand	T. S. Shenston	144, 929	Nov. 25, 1873	662	224	4	566
Inkstand	J. B. Thurston and F. M. West	135, 296	Jan. 28, 1873	749	242	3	108
Inkstand-filler	M. C. Stebbins	136, 186	Feb. 25, 1873	743	240	3	223
Inkstands, Tool for molding	A. W. Brinkerhoff	145, 619	Dec. 16, 1873	527	173	4	652
Ink-well	J. H. Kidder	136, 069	Feb. 18, 1873	626	205	3	202
Illuminating apparatus	J. A. Thompson	146, 109	Dec. 30, 1873	988	319	4	712
Illuminating plate, Flexible sheet-metal	T. Hyatt	145, 185	Dec. 2, 1873	137	45	4	596
Implement	H. B. Whitehead	139, 748	June 10, 1873	293	91	3	648
Implement, Compound	A. Iske	136, 601	Mar. 11, 1873	235	80	3	273
Insect-destroyer	J. A. Finney	140, 818	July 15, 1873	427	144	4	62
Insect-destroyer	D. G. Mosher	137, 469	Apr. 1, 1873	172	55	3	371
Insect-destroyer	S. W. Thomas	139, 277	May 27, 1873	758	240	3	590
Insect-destroying attachment for cultivators	C. T. Hurd	145, 949	Dec. 30, 1873	848	276	4	700
Insect-destroying compound	W. C. Bibb	142, 985	Sept. 23, 1873	593	.....	4	323
Insect-destroying compound	J. B. Lunbeck	141, 512	Aug. 5, 1873	90	.....	4	142
Insect-destroying compound	W. B. Royall	140, 079	June 17, 1873	586	.....	3	680
Insect-powder gun	W. H. Ball	141, 481	Aug. 5, 1873	63	20	4	140
Insect-trap	J. W. Anderson	137, 588	Apr. 8, 1873	287	89	3	392
Insect-trap	M. Rigell	135, 366	Jan. 28, 1873	816	264	3	113
Insect-trap	J. M. Smith	137, 255	Mar. 25, 1873	822	270	3	340
Insect, vermin, &c., Compound for destroying	E. B. Sears	136, 185	Feb. 25, 1873	743	.....	3	223
Insulating and finishing compound for conducting-wires.	T. L. Reed and E. F. Phillips	144, 794	Nov. 18, 1873	538		4	545

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Insulator for battery-cup	J. H. Thomas	136, 191	Feb. 25, 1873	747	241	3	223
Insulator, Telegraph	C. Fox and E. J. Heston	145, 997	Dec. 30, 1873	887	288	4	703
Insulator, Telegraph	N. Hendricks	135, 334	Jan. 28, 1873	786	254	3	111
Insulator, Telegraph-line	P. Eby and M. B. Fenninger	138, 489	May 6, 1873	19	7	3	499
Insulator, Telegraph-line	E. A. Merrell	138, 512	May 6, 1873	41	14	3	501
Insulator, Telegraph-line	I. I. Tatom	139, 436	May 27, 1873	893	288	3	601
Invalid-chair	T. Armstrong	140, 868	July 15, 1873	466	158	4	65
Invalid chair and lounge, Combined	D. G. Boardman	136, 962	Mar. 18, 1873	547	181	3	307
Iron :							
<i>See</i> Axle-iron.							
Carriage-iron.							
Curling-iron.							
Plane-iron.							
Plow-iron.							
Sad-iron.							
Sad and embossing iron.							
Sad and fluting iron.							
Shaft-iron.							
Smoothing-iron.							
Soldering-iron.							
Iron and other metals, Composition for coating	F. J. Seybold	135, 668	Feb. 11, 1873	266	.....	3	160
Iron and other ores, Separator for	A. Goodhart	139, 782	June 10, 1873	324	100	3	650
Iron and steel, Converting cast iron into wrought	A. C. Rand	137, 025	Mar. 18, 1873	603	200	3	312
Iron and steel from granulated iron, Manufacture of	C. Wood	144, 009	Oct. 28, 1873	595	.....	4	457
Iron and steel, Furnace for manufacture of	G. E. Harding	143, 145	Sept. 23, 1873	720	{ 247 248 }	4	333
Iron and steel, Manufacture of	O. Bolton, jr., and J. Pedder	140, 761	July 15, 1873	375	.....	4	58
Iron and steel, Manufacture of	C. Carpenter, jr	145, 843	Dec. 23, 1873	728	239	4	680
Iron and steel, Manufacture of	E. Peckham	143, 637	Oct. 14, 1873	219	.....	4	407
Iron and steel, Manufacture of	J. Pedder and G. Abel	137, 621	Apr. 8, 1873	312	97	3	394
Iron and steel, Manufacturing	O. Bolton, jr., and J. Pedder	135, 512	Feb. 4, 1873	106	.....	3	136
Iron and steel, Preventing the corrosion of	R. A. Fisher	145, 496	Dec. 16, 1873	415	.....	4	643
Iron and steel, Refining	L. M. Phelps	145, 680	Dec. 16, 1873	579	190	4	656
Iron and steel to anneal and toughen them, Treating	A. F. Andrews	142, 977	Sept. 23, 1873	586	199	4	322
Iron and steel, Welding	J. Popping	145, 445	Dec. 9, 1873	362	.....	4	627
Iron articles into steel, Process for converting cast	R. A. Jackson	135, 646	Feb. 11, 1873	248	.....	3	159
Iron bars, Furnace for heating	J. Pardoe	136, 667	Mar. 11, 1873	292	97	3	278
Iron chips, &c., for remelting, Process for preparing	A. Pevey	140, 383	July 1, 1873	41	13	4	11
Iron, Finery-fire for manufacture of	T. Ash and Z. Walker	144, 821	Nov. 25, 1873	572	195	4	558
Iron from blast-furnace slag, Manufacture of	J. J. Vinton	143, 600	Oct. 14, 1873	186	.....	4	404
Iron from ore, Manufacture of cast	P. E. Jay	143, 350	Sept. 30, 1873	906	.....	4	364
Iron, Furnace for producing malleable	D. R. Nash	142, 716	Sept. 9, 1873	349	118	4	282
Iron, Hardening the surface of	R. T. King	145, 110	Dec. 2, 1873	64	.....	4	590
Iron, Manufacture of	W. Bushnell	135, 886	Feb. 18, 1873	473	152	3	190
Iron, Manufacture of	W. J. Taylor	145, 461	Dec. 9, 1873	374	.....	4	628
Iron, Manufacture of	W. J. Taylor	145, 462	Dec. 9, 1873	376	.....	4	628
Iron, Manufacture of refined cast	C. Burgess	141, 319	July 29, 1873	917	300	4	119
Iron, Manufacturing sheet	W. D. Wood	137, 585	Apr. 8, 1873	284	.....	3	391
Iron, Process of manufacturing rolled	G. W. Billings	139, 359	May 27, 1873	819	.....	3	595
Iron-puddling apparatus	J. Davies	143, 811	Oct. 21, 1873	401	133	4	431
Iron, steel, &c., Compound for treating	W. A. Skinner and J. E. Goodson	139, 335	May 27, 1873	800	.....	3	593
Ironing apparatus	E. Sumption	135, 606	Feb. 4, 1873	203	63	3	143
Ironing apparatus	R. A. Tyler	136, 471	Mar. 4, 1873	103	34	3	254
Ironing-board	E. Bassett	140, 758	July 15, 1873	373	127	4	58
Ironing-board	R. N. Herring	138, 331	Apr. 29, 1873	994	313	3	479
Ironing-machine	G. W. Cottingham	144, 743	Nov. 18, 1873	496	{ 168 169 }	4	541
Ironing-machine	J. T. Walker	145, 034	Nov. 25, 1873	754	{ 254 255 }	4	574
Ironing-table	C. Blom, jr	145, 614	Dec. 16, 1873	523	172	4	652
Ironing-table	E. S. Farson	145, 162	Dec. 2, 1873	115	38	4	594
Ironing-table	J. H. Frank	141, 639	Aug. 12, 1873	216	68	4	160
Ironing-table	J. Frankenfield and W. E. Kich- line	140, 356	July 1, 1873	20	6	4	9
Ironing-table	W. B. Grosh and S. H. Foreman	143, 071	Sept. 23, 1873	665	228	4	328
Ironing-table	J. R. Groves	136, 056	Feb. 18, 1873	612	201	3	201
Ironing-table	A. J. Palmberg	142, 645	Sept. 9, 1873	290	95	4	277
Ironing-table	L. Scofield	144, 869	Nov. 25, 1873	617	210	4	562
Ironing-table	W. H. Sparks	144, 418	Nov. 11, 1873	219	73	4	508
Ironing-table	A. Wechsler	135, 303	Jan. 28, 1873	754	243	3	108
Ironing-table, Folding	W. Edwards	137, 602	Apr. 8, 1873	299	92	3	393
Ironing-table, lap-board, and step-ladder, Combined	H. C. Smith	136, 390	Mar. 4, 1873	34	12	3	248
Irrigation, Subterranean	W. H. Pugh	142, 413	Sept. 2, 1873	80	26	4	249
Isinglass, Manufacture of	J. Manning	134, 690	Jan. 7, 1873	181	59	3	21
J.							
Jack :							
<i>See</i> Boot-jack.							
Carriage-jack.							
Hoisting-jack.							
Hydraulic jack.							
Lasting-jack.							
Lifting-jack.							
Painter's jack.							
Shoe fastening jack.							
Spinning-jack.							
Wagon-jack.							
Jacket, hunting	J. Garaud	139, 950	June 17, 1873	475	149	3	670
Jar :							
<i>See</i> Candy-jar.							
Drill-jar.							
Fruit-jar.							
Jelly-jar.							
Slop-jar.							

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Jelly, Hand-press for.....	J. M. Newton	141, 809	Aug. 12, 1873	367	120	4	173
Jelly-glass.....	D. C. Ripley.....	139, 081	May 20, 1873	562	176	3	566
Jelly-glass.....	T. A. Zellers.....	137, 995	Apr. 15, 1873	647	204	3	434
Jelly-glass lid.....	J. Adams.....	138, 833	May 13, 1873	337	194	3	535
Jelly-glass lid.....	D. Challinor.....	138, 735	May 13, 1873	251	78	3	528
Jelly-jar.....	W. C. King.....	138, 502	May 6, 1873	28	10	3	500
Jelly-tumbler.....	W. Doyle.....	136, 492	Mar. 4, 1873	121	39	3	255
Jet, Adjustable spray.....	A. Nickerson.....	142, 719	Sept. 9, 1873	352	119	4	282
Jewel-case.....	C. Beck.....	144, 431	Nov. 11, 1873	229	77	4	508
Jeweler's drilling-device.....	J. K. Laudermilch.....	143, 084	Sept. 23, 1873	675	232	4	329
Jeweler's hand-press.....	J. McWilliams.....	143, 023	Sept. 23, 1873	625	212	4	325
Jewelers' use, Manufacture of catches for.....	G. H. Fuller.....	145, 938	Dec. 16, 1873	837	272	4	700
Jewelry-bases, Device for manufacturing.....	S. Cottle.....	140, 616	July 8, 1873	252	85	4	40
Jewelry-bases, Manufacture of.....	S. Cottle.....	135, 087	Jan. 21, 1873	546	178	3	79
Jewelry-bases, Manufacture of.....	S. Cottle.....	135, 088	Jan. 21, 1873	546	178	3	79
Jewelry, diamonds, &c., Chemical compound for cleaning.....	A. H. Longley and E. R. Stickney	145, 065	Dec. 2, 1873	23	.....	4	587
Jewelry-ornaments, Pin for.....	J. P. Courtney.....	145, 990	Dec. 30, 1873	882	286	4	703
Joiner's clamp.....	W. H. Goodchild and S. F. Hay..	136, 152	Feb. 25, 1873	717	232	3	221
Joiner's clamp.....	E. A. Walker.....	140, 747	July 8, 1873	361	192	4	49
Joiner's gage.....	S. H. Jennings and W. F. Arnold.	146, 075	Dec. 30, 1873	954	308	4	709
Joint:							
<i>See</i> Ball and socket joint.							
Bracelet-joint.							
Carriage-top joint.							
Doll-joint.							
Pipe-joint.							
Railway-rail joint.							
Sheathing-joint.							
Sheet-metal joint.							
Stove-pipe joint.							
Universal joint.							
Journal, Adjustable.....	M. Jackson.....	135, 477	Feb. 4, 1873	79	25	3	133
Journal and bearing.....	J. Whitaker.....	145, 467	Dec. 9, 1873	380	126	4	628
Journal and shaft-bearing, Frictionless.....	J. Eccles.....	141, 129	July 22, 1873	722	240	4	95
Journal, Anti-friction.....	M. E. Dayton.....	138, 011	Apr. 22, 1873	678	{ 214 } 215	3	446
Journal-box.....	S. Aland.....	136, 198	Feb. 25, 1873	752	243	3	224
Journal-box.....	J. A. Althouse.....	139, 287	May 27, 1873	766	243	3	590
Journal-box.....	J. R. Morris.....	138, 916	May 13, 1873	405	127	3	541
Journal-box lining.....	S. Gwynn.....	138, 641	May 6, 1873	153	49	3	510
Journal-box lining.....	S. Gwynn.....	138, 642	May 6, 1873	154	49	3	510
Journal-box lining.....	S. Gwynn.....	138, 643	May 6, 1873	154	50	3	510
Journal-box lining.....	S. Gwynn.....	138, 644	May 6, 1873	155	50	3	510
Journal-box lining.....	S. Gwynn.....	138, 645	May 6, 1873	155	50	3	510
Journal-box lining.....	S. Gwynn.....	138, 646	May 6, 1873	156	50	3	510
Journal-box lining.....	S. Gwynn.....	140, 774	July 15, 1873	385	132	4	59
Journal-box lining.....	S. Gwynn.....	140, 775	July 15, 1873	386	132	4	59
Journal-box, Lubricating.....	J. Morin.....	146, 013	Dec. 30, 1873	903	292	4	705
Journal-box, Railway-car.....	R. N. Allen.....	140, 568	July 8, 1873	207	69	4	36
Journal-boxes, Machine for forming, shaping, and dressing.....	J. W. Cole.....	139, 773	June 10, 1873	316	98	3	650
Journal-boxes or bearings, Process of grinding.....	J. W. Cole.....	139, 772	June 10, 1873	315	98	3	650
Journal-boxes, Machine for dressing brasses of.....	G. Sanford.....	136, 338	Feb. 25, 1873	873	281	3	233
Journal, Car-axle.....	J. Whitaker.....	145, 035	Nov. 25, 1873	755	255	4	574
Journal, Lubricating.....	G. A. Chapman.....	142, 206	Aug. 26, 1873	742	244	4	222
Journal or shaft hanger.....	J. Whitaker.....	145, 264	Dec. 2, 1873	203	70	4	601
Journal-packing rack.....	W. H. Humphrey.....	142, 698	Sept. 9, 1873	335	112	4	281
Journal to feed-roller, Attaching.....	J. M. Amsden.....	142, 364	Sept. 2, 1873	39	13	4	245
Joiner, Universal.....	E. Passé.....	142, 348	Sept. 2, 1873	23	8, 9	4	244
Jug or pitcher, Molasses.....	M. J. Bennett.....	135, 260	Jan. 28, 1873	722	231	3	105
Jump-seat, Wagon.....	C. H. Howell.....	137, 681	Apr. 8, 1873	366	114	3	398
K.							
Kaleidoscope-object.....	C. G. Bush.....	143, 271	Sept. 30, 1873	832	286	4	359
Kerosene-heater.....	Z. B. and C. E. Grandy.....	141, 046	July 22, 1873	648	218	4	89
Kettle.....	W. J. Evans and W. Perry.....	139, 502	June 3, 1873	52	16	3	613
Kettle-lifter.....	E. A. Thissell.....	141, 020	July 22, 1873	628	211	4	88
Kettles and other hollow ware, Machine for making brass.....	F. J. Seymour.....	134, 938	Jan. 14, 1873	407	130	3	53
Key:							
<i>See</i> Door-key.							
Lock-key.							
Piano-key.							
Telegraph-key.							
Telegraph transmitting-key.							
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Key-board instruments, Key-cap for.....	J. P. Lord.....	144, 399	Nov. 11, 1873	199	68	4	506
Key-board, Transposing.....	A. D. B. Wolff.....	142, 974	Sept. 16, 1873	579	196	4	312
Key-check.....	J. J. De Barry.....	135, 092	Jan. 21, 1873	549	179	3	79
Key, Clock and watch.....	P. J. Hoffiger.....	143, 285	Sept. 30, 1873	843	290	4	360
Key-fastener.....	W. Neracher.....	138, 272	Apr. 29, 1873	938	296	3	475
Key-hole guard.....	W. N. Hall.....	145, 865	Dec. 23, 1873	747	244	4	682
Key-hole guard.....	W. H. Taylor.....	141, 833	Aug. 12, 1873	386	126	4	174
Key, Machine for forming spring.....	M. Deering.....	143, 226	Sept. 30, 1873	794	274	4	355
Key-ring.....	W. T. Jenks.....	135, 712	Feb. 11, 1873	306	97	3	164
Kiln:							
<i>See</i> Brick-kiln.							
Drying-kiln.							
Lime-kiln.							
Malt-kiln.							
Kiln.....	R. Connable.....	137, 180	Mar. 25, 1873	752	249	3	335
King-bolt and plate, Clip.....	H. M. Beecher.....	139, 855	June 17, 1873	392	122	3	663

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King-bolt blank, Die for swaging clip	F. Van Patten	141, 681	Aug. 12, 1873	253	81	4	163
King-bolt, Carriage.....	J. L. H. Mosier.....	136, 255	Feb. 26, 1873	799	259	3	228
King-bolt, Die for making clip for	A. Dillenbeck.....	136, 143	Feb. 25, 1873	710	229	3	221
King-bolt, Die for making clip for	F. Van Patten	141, 680	Aug. 12, 1873	253	80	4	163
King-bolt for perch-carriage	J. L. H. Mosier.....	138, 342	Apr. 29, 1873	1, 002	315	3	480
King-bolt for vehicles.....	J. Deeble	144, 323	Nov. 4, 1873	126	42	4	488
Kitchen and ironing table	J. Good	143, 977	Oct. 28, 1873	562	187	4	454
Kite.....	C. J. Hardekopf.....	135, 987	Feb. 18, 1873	554	183	3	197
Knapsack	G. H. Palmer.....	139, 731	June 10, 1873	274	86	3	647
Kneading-board	H. P. Jones	144, 768	Nov. 18, 1873	518	175	4	543
Knife:							
<i>See</i> Butcher's knife.							
Butter-knife.							
Corn-knife.							
Cornstalk-knife.							
Drawing-knife.							
Folding-knife.							
Fruit-knife.							
Harvester-knife.							
Hay-knife.							
Pocket-knife.							
Pruning-knife.							
Putty-knife.							
Reaper and mower knife.							
Shoe-knife.							
Table-knife.							
Tobacco-knife.							
Knife.....	L. Eddy.....	140, 997	July 22, 1873	607	204	4	86
Knife and fork cleaner.....	E. Marwedel.....	140, 932	July 15, 1873	531	177	4	70
Knife-cleaner.....	H. C. Gilbert.....	136, 990	Mar. 18, 1873	571	191	3	309
Knife-cleaner.....	T. & L. Gingras.....	139, 057	May 20, 1873	536	169	3	564
Knife-cleaner.....	C. B. Sheldon.....	145, 909	Dec. 23, 1873	789	259	4	685
Knife handle, Pocket.....	J. W. Ayres.....	137, 648	Apr. 8, 1873	335	104	3	396
Knife-polisher.....	F. W. Tarble and H. W. Sawyer.....	136, 188	Feb. 25, 1873	746	240	3	223
Knife polisher and sharpener	T. Bootsmann.....	143, 871	Oct. 21, 1873	451	151	4	435
Knife-scourer.....	E. W. Haven.....	136, 598	Mar. 11, 1873	234	79	3	273
Knit-fabric.....	B. J. McGee.....	144, 915	Nov. 25, 1873	650	221	4	565
Knit-fabric and method of knitting	D. Bickford.....	136, 639	Mar. 11, 1873	269	90	3	276
Knit-fabrics, Machine for uniting selvages of	T. Beven.....	137, 997	Apr. 22, 1873	662	{ 209 210 257 258 }	{ 3 3 3 3 }	{ 445 706 706 706 }
Knit-fabrics, Machine for napping, brushing, &c., tubular.	C. and I. Tompkins	140, 320	June 24, 1873	814	{ 257 258 }	{ 3 3 }	{ 706 706 }
Knitting-holder.....	H. P. Joy.....	141, 796	Aug. 12, 1873	356	117	4	172
Knitting-machine.....	J. M. Armour.....	136, 480	Mar. 4, 1873	109	37	3	254
Knitting-machine.....	C. Callahan.....	140, 809	July 15, 1873	416	{ 141 142 185 186 }	{ 4 4 3 3 }	{ 61 61 569 569 }
Knitting-machine.....	W. Campion and W. Campion	139, 114	May 20, 1873	589	{ 185 186 }	{ 3 3 }	{ 569 569 }
Knitting-machine.....	S. V. Essick.....	140, 691	July 8, 1873	309	106	4	45
Knitting-machine.....	H. Günther.....	134, 881	Jan. 14, 1873	356	113	3	49
Knitting-machine.....	J. Leonard.....	135, 823	Feb. 11, 1873	406	131	3	171
Knitting-machine.....	G. Merrill.....	140, 635	July 8, 1873	265	90	4	41
Knitting-machine.....	C. H. Platt and G. A. Stanbery.....	137, 568	Apr. 8, 1873	268	83	3	390
Knitting-machine.....	L. D. Sanborn.....	143, 468	Oct. 7, 1873	59	21	4	385
Knitting-machine.....	J. and J. Smith.....	140, 086	June 17, 1873	595	188	3	680
Knitting-machine.....	E. Tailbouis and A. Renevey.....	136, 012	Feb. 18, 1873	574	{ 189 190 }	{ 3 3 }	{ 198 198 }
Knitting-machine.....	O. F. Tripp.....	140, 800	July 15, 1873	408	139	4	61
Knitting-machine.....	O. Twombly.....	141, 836	Aug. 12, 1873	388	127	4	174
Knitting-machine.....	L. Woodward.....	145, 079	Dec. 2, 1873	38	12	4	588
Knitting-machine.....	C. H. Young.....	143, 051	Sept. 23, 1873	650	{ 222 223 }	{ 4 4 }	{ 327 327 }
Knitting-machine needle.....	C. H. Platt and G. A. Stanbery	136, 262	Feb. 25, 1873	808	261	3	228
Knitting-machine needles, Manufacture of.....	J. H. Bullard.....	140, 611	July 8, 1873	248	84	4	40
Knitting-machine, Register for tubular.....	D. A. Lehman.....	145, 509	Dec. 16, 1873	433	141	4	644
Knitting-machine, Set-up device for.....	H. L. Arnold.....	142, 429	Sept. 2, 1873	94	31	4	250
Knitting-machine, Welt-thread.....	C. Callahan.....	135, 625	Feb. 11, 1873	228	72	3	158
Knitting-machine weight-hook	C. H. Koegel.....	137, 778	Apr. 15, 1873	466	145	3	419
Knitting-machine, Yarn take-up and tension-device for	H. L. Arnold.....	141, 534	Aug. 5, 1873	106	33	4	143
Knob, Door.....	H. H. Elwell.....	142, 451	Sept. 2, 1873	115	37	4	252
Knob guard, Door.....	H. Ahrend.....	137, 400	Apr. 1, 1873	107	35	3	365
Knob, Manufacture of door.....	J. Ottner.....	138, 758	May 13, 1873	271	84	3	529
Knob, Mold for casting metal.....	C. Rebstock and J. Ottner.....	134, 931	Jan. 14, 1873	400	128	3	52
Knob, Silvered-glass door.....	J. W. Haines.....	141, 504	Aug. 5, 1873	84	26	4	142
Knob-spindle.....	W. Varah.....	136, 795	Mar. 11, 1873	398	132	3	286
Knob to latch, Attaching.....	L. Michaels.....	143, 174	Sept. 23, 1873	742	255	4	335
Knob to spindle, Attaching.....	F. M. and J. B. Merriam.....	141, 285	July 29, 1873	885	290	4	116
Knob to spindle, Attaching.....	S. Selden.....	134, 708	Jan. 7, 1873	196	63	3	22
Knob to spindle, Attaching.....	H. J. B. Whipple.....	141, 408	July 29, 1873	1, 007	327	4	125
Knobs, &c., Plastic composition for manufacture of.....	H. E. Shepard.....	140, 735	July 8, 1873	347	.....	4	48
Knobs to drawers, &c., Attaching.....	S. A. Brackett.....	144, 597	Nov. 18, 1873	374	126	4	532
Knock-down chair.....	C. R. Long.....	137, 613	Apr. 8, 1873	307	95	3	393
L.							
Label and seal for lock, Combined.....	E. J. Brooks.....	139, 764	June 10, 1873	308	95	3	649
Label, Bottle.....	H. Frank.....	135, 034	Jan. 21, 1873	506	163	3	76
Label for hat-lining, Ornamental	T. W. Bracher.....	145, 391	Dec. 9, 1873	316	106	4	623
Labeling-machine.....	C. W. Greene.....	136, 154	Feb. 25, 1873	719	232	3	221
Lace, ribbon, &c., case.....	M. Deitzler.....	137, 297	Apr. 1, 1873	17	5	3	358
Ladder.....	J. Eagon.....	141, 126	July 22, 1873	719	239	4	95
Ladder.....	A. P. Smith.....	146, 029	Dec. 30, 1873	914	296	4	706
Ladder, Adjustable step.....	J. J. Hardenbrook and S. Belford.....	139, 004	May 20, 1873	492	155	3	561

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Ladder and ironing board, Combined step	H. H. Kendrick	145,738	Dec. 23, 1873	642	{ 209 210	{ 4	673
Ladder, bench, and clothes frame, Combined step	H. H. Barker	145,716	Dec. 23, 1873	621	204	4	672
Ladder chair, Step	H. Willgohe	139,488	June 3, 1873	41	13	3	612
Ladder, Elevating	A. Miller	139,175	May 20, 1873	651	203	3	574
Ladder, Extensible	J. C. Hearne and D. Adams	137,679	Apr. 8, 1873	365	113	3	398
Ladder, Extension	W. O'Connor	137,948	Apr. 15, 1873	606	191	3	431
Ladder, Extension	J. Pine	139,689	June 10, 1873	229	73	3	643
Ladder, Extension step	L. B. Covert	138,234	Apr. 29, 1873	900	284	3	472
Ladder, Extension step	A. W. and J. E. Walker	137,040	Mar. 18, 1873	617	204	3	313
Ladder, Fire-escape	H. Lyles	136,844	Mar. 18, 1873	450	149	3	300
Ladder, Fire-escape	W. W. Parsons	142,409	Sept. 2, 1873	78	25	4	248
Ladder, Fire-escape	G. Pfeeger	143,462	Oct. 7, 1873	55	19	4	385
Ladder, Fire-escape	J. S. Pierson	143,182	Sept. 23, 1873	747	258	4	335
Ladder, Fire-escape	C. H. White	138,304	Apr. 29, 1873	970	305	3	477
Ladder, Fireman's	M. Cronin	144,958	Nov. 25, 1873	684	231	4	568
Ladder, Fireman's	P. Porta	142,349	Sept. 2, 1873	24	9	4	244
Ladder, Fireman's extension	G. W. Harris	145,867	Dec. 23, 1873	751	245	4	682
Ladder, Folding	J. M. White and A. J. Kee	137,582	Apr. 8, 1873	283	87	3	391
Ladder, Fruit	A. Longcor and J. B. Longcor	140,286	June 24, 1873	783	248	3	704
Ladder, Step	C. Frizell	140,359	July 1, 1873	22	7	4	10
Ladder, Step	C. Frizell	140,578	July 8, 1873	217	72	4	37
Ladder, Step	M. N. Lovell	136,659	Mar. 11, 1873	284	95	3	277
Ladder, Step	A. W. O'Brien	145,522	Dec. 16, 1873	445	145	4	645
Ladder, Step	J. S. Oakley and B. M. Post	139,183	May 20, 1873	657	205	3	574
Ladder, Step	S. Wright	138,977	May 13, 1873	452	142	3	545
Ladies' work-stand	G. S. Manning	139,591	June 3, 1873	128	42	3	619
Lamp	T. B. Atterbury	140,988	July 22, 1873	599	203	4	85
Lamp	L. J. Atwood	135,749	Feb. 11, 1873	334	107	3	166
Lamp	L. Berns	142,609	Sept. 9, 1873	263	86	4	275
Lamp	W. S. Blaisdell and C. K. Young	142,432	Sept. 2, 1873	95	32	4	250
Lamp	G. Brownlee	138,070	Apr. 22, 1873	737	233	3	451
Lamp	R. Christy	141,763	Aug. 12, 1873	322	105	4	169
Lamp	J. M. Clark	140,764	July 15, 1873	377	{ 129 130	{ 4	58
Lamp	R. E. Dietz	144,070	Oct. 28, 1873	644	212	4	461
Lamp	F. A. Flanegin	136,427	Mar. 4, 1873	61	22	3	250
Lamp	R. Hitchcock	134,547	Jan. 7, 1873	39	13	3	10
Lamp	R. Hitchcock	142,103	Aug. 26, 1873	656	216	4	215
Lamp	R. Hitchcock	145,176	Dec. 2, 1873	129	42	4	595
Lamp	J. H. Irwin	138,653	May 6, 1873	163	52	3	511
Lamp	J. H. Irwin	138,654	May 6, 1873	165	53	3	511
Lamp	F. Kampfe	143,452	Oct. 7, 1873	47	16	4	384
Lamp	J. Kirby, jr.	141,933	Aug. 19, 1873	487	161	4	192
Lamp	J. E. Leighton	138,509	May 6, 1873	36	12	3	500
Lamp	R. Marsh	139,964	June 17, 1873	484	152	2	671
Lamp	C. Mayer	138,812	May 13, 1873	318	98	3	533
Lamp	L. Michaels	136,849	Mar. 18, 1873	455	151	3	300
Lamp	J. A. Pease	138,185	Apr. 22, 1873	836	264	3	458
Lamp	J. A. Pease	144,130	Oct. 28, 1873	692	229	4	465
Lamp	O. N. Perkins	144,132	Oct. 28, 1873	693	230	4	465
Lamp	F. Rhind	142,730	Sept. 9, 1873	363	122	4	283
Lamp	G. L. Simmons	136,553	Mar. 4, 1873	182	59	3	260
Lamp	J. C. Wharton	142,425	Sept. 2, 1873	90	30	4	249
Lamp	T. H. White and E. Knight	136,573	Mar. 4, 1873	199	66	3	261
Lamp-bracket	L. Hull	142,106	Aug. 26, 1873	660	216	4	215
Lamp-bracket	G. Jones	139,582	June 3, 1873	118	39	3	618
Lamp, Candle	J. A. Pease	138,925	May 13, 1873	412	129	3	541
Lamp, Car	J. E. Cross	141,856	Aug. 19, 1873	413	{ 134 135	{ 4	186
Lamp, Car	J. L. Howard	143,411	Oct. 7, 1873	12	4	4	382
Lamp-chimney cleaner	B. E. Chollar and J. G. Johannes	136,704	Mar. 11, 1873	321	106	3	280
Lamp-chimney cleaner	R. G. Forsyth	137,670	Apr. 8, 1873	358	111	3	397
Lamp-chimney cleaner	H. W. Prouty	135,665	Feb. 11, 1873	263	83	3	160
Lamp-chimney, Glass mold for forming	M. H. Collins	135,971	Mar. 18, 1873	555	184	3	308
Lamp-chimney supporter	W. Mears and H. Davies	140,214	June 24, 1873	722	227	3	698
Lamp cooking-apparatus, Portable	A. M. Silber and F. White	136,104	Feb. 18, 1873	656	{ 214 215	{ 3	204
Lamp-extinguisher	F. Hille	145,870	Dec. 23, 1873	754	246	4	682
Lamp-extinguisher	R. Lange	139,398	May 27, 1873	863	276	3	598
Lamp-extinguisher	W. D. Lindsley	141,801	Aug. 12, 1873	360	118	4	172
Lamp-extinguisher	D. Pike and O. B. Graham	142,508	Sept. 2, 1873	168	54	4	255
Lamp-extinguisher	F. C. Wireman	142,067	Aug. 19, 1873	607	200	4	201
Lamp-filler	H. H. V. Lilley	138,415	Apr. 29, 1873	1,063	334	3	485
Lamp fountains, Mold for glass	J. Wing	143,864	Oct. 21, 1873	446	149	4	435
Lamp-heater	W. Friel	139,140	May 20, 1873	617	193	3	571
Lamp, &c., Indicating filler for	J. A. Ryan	134,819	Jan. 14, 1873	305	97	3	44
Lamp-lighting apparatus	M. A. Lynch	139,255	May 27, 1873	734	232	3	588
Lamp, Magnesium	I. S. Russell and H. R. Russell	138,346	Apr. 29, 1873	1,005	316	3	480
Lamp, Naval store-room or coach	J. J. Walton	140,448	July 1, 1873	87	30	4	15
Lamp, Paraffine	H. Ryder	138,441	Apr. 29, 1873	1,089	344	3	487
Lamp-post	L. A. Gonch	139,504	June 3, 1873	53	17	3	613
Lamp-post attachment for supporting electrical wire	J. P. Tirrell	139,630	June 3, 1873	159	53	3	622
Lamp, Safety apparatus for	C. J. Brown	135,074	Jan. 21, 1873	538	175	3	78
Lamp-shade	W. Simons	137,034	Mar. 18, 1873	612	202	3	313
Lamp-shade and drip-cup, Combined	J. S. and T. B. Atterbury	145,548	Dec. 16, 1873	470	{ 153 154	{ 4	647
Lamp-shade holder	E. E. Conrad	135,778	Feb. 11, 1873	359	115	3	168
Lamp-shade holder	M. W. House	141,223	July 29, 1873	828	271	4	111
Lamp-shade or globe-holder	L. J. Atwood	141,251	July 29, 1873	857	280	4	113
Lamp-shade supports, Process of making	W. N. Weedon	145,702	Dec. 16, 1873	599	196	4	658
Lamp, Slide-pendant for hanging	J. A. Evarts	145,637	Dec. 16, 1873	542	178	4	653
Lamp, Street	M. B. Dyott	137,538	Apr. 8, 1873	243	75	3	388
Lamp, Street	J. H. Eyre	143,000	Sept. 23, 1873	606	205	4	324
Lamp, Street	J. S. Hagerty	142,693	Sept. 9, 1873	331	111	4	280

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Lamp, Street	F. Hartman	136, 373	Mar. 4, 1873	21	7	3	247
Lamp, Street	C. F. Jacobson and A. Burger ..	139, 394	May 27, 1873	855	{ 273 274 }	3	598
Lamp, Street	J. F. Marsh	140, 149	June 24, 1873	668	210	3	694
Lamp, Street	J. G. Miner	140, 062	June 17, 1873	573	181	3	679
Lamp, Street	H. Hahe	142, 500	Sept. 2, 1873	161	52	4	255
Lamp, Supplying oil to street ..	R. V. De Guinon	140, 815	July 15, 1873	425	144	4	62
Lamp-wick	P. Martin	145, 667	Dec. 16, 1873	568	187	4	655
Lamp-wick, Process for treating ..	S. F. Sutherland	135, 252	Jan. 28, 1873	716	.....	3	105
Lamp-wick raiser	A. Combs	136, 034	Feb. 18, 1873	594	195	3	200
Lamp-wick trimmer	S. Naylor and A. Fairchild ..	142, 265	Aug. 26, 1873	790	261	4	226
Land-roller	W. H. Grow and C. M. Sloan ..	144, 272	Nov. 4, 1873	87	28	4	485
Land-roller	W. Williams	144, 489	Nov. 11, 1873	275	93	4	512
Land-roller	J. Woolridge	135, 191	Jan. 21, 1873	631	206	3	86
Lantern	H. Beebe	134, 631	Jan. 7, 1873	123	40	3	16
Lantern	W. J. Berry	142, 984	Sept. 23, 1873	592	201	4	323
Lantern	L. F. Betts	141, 311	July 29, 1873	908	298	4	118
Lantern	J. P. Connor and M. T. Hynes ..	138, 232	Apr. 29, 1873	898	283	3	472
Lantern	T. A. Davies	136, 218	Feb. 25, 1873	767	248	3	225
Lantern	E. K. Haynes	136, 994	Mar. 18, 1873	575	192	3	310
Lantern	E. K. Haynes	144, 200	Nov. 4, 1873	26	7	4	480
Lantern	S. Hughes	135, 711	Feb. 11, 1873	305	97	3	164
Lantern	G. B. Isham	138, 805	May 13, 1873	311	96	3	533
Lantern	J. Knitz	146, 079	Dec. 30, 1873	957	309	4	709
Lantern	A. Loeffelholz and A. Prier ..	137, 223	Mar. 25, 1873	794	262	3	338
Lantern	W. McKay	141, 008	July 22, 1873	616	208	4	87
Lantern	S. Naylor	141, 162	July 22, 1873	757	249	4	98
Lantern	T. Smith	139, 030	May 20, 1873	510	161	3	562
Lantern	W. Westlake	142, 134	Aug. 26, 1873	683	224	4	217
Lantern, Decorative	C. C. E. Schwartz	142, 520	Sept. 2, 1873	177	58	4	256
Lantern-guard	T. Smith	136, 782	Mar. 11, 1873	387	127	3	285
Lantern, Magic	A. G. Buzby	139, 865	June 17, 1873	402	126	3	664
Lantern, Magic	A. G. Buzby	144, 314	Nov. 4, 1873	116	39	4	488
Lantern, Magic	P. Diehl	136, 142	Feb. 25, 1873	709	229	3	221
Lantern, Ship's	H. Saunders	135, 371	Jan. 28, 1873	820	265	3	113
Lantern, Ship's	H. Saunders	138, 532	May 6, 1873	58	20	3	502
Lantern, Signal	S. W. Clark and W. R. Sykes ..	140, 015	June 17, 1873	526	167	3	674
Lantern, Signal	T. A. Davies	135, 783	Feb. 11, 1873	363	117	3	168
Lantern, Signal	H. B. Fernald	142, 223	Aug. 26, 1873	756	249	4	223
Lantern, Signal	S. H. Miller	142, 257	Aug. 26, 1873	784	258	4	225
Lantern, Signal	S. H. Miller	144, 554	Nov. 11, 1873	331	{ 111 112 }	4	516
Lantern, Signal	I. W. Shaler	143, 425	Oct. 7, 1873	27	10	4	383
Lap-board	S. Mahan	135, 040	Jan. 21, 1873	511	165	3	76
Lap-board	G. K. Proctor	140, 074	June 17, 1873	582	184	3	679
Lap-board	E. J. Sprague	140, 313	June 24, 1873	805	255	3	706
Lard and tallow, Drying	A. Smith	142, 743	Sept. 9, 1873	375	.....	4	284
Lard, Apparatus and process for rendering ..	W. C. Marshall	137, 698	Apr. 8, 1873	382	118	3	399
East	W. J. B. Mills	137, 616	Apr. 8, 1873	309	96	3	393
East	I. N. C. Saville	139, 196	May 20, 1873	670	210	3	575
Last and shoe holder	B. J. Tayman	139, 343	May 27, 1873	806	{ 257 258 }	3	594
Last-block fastener	D. Haurd	140, 827	July 15, 1873	434	147	4	63
Last-block fastener	N. R. Streeter	144, 368	Nov. 4, 1873	163	54	4	492
Last-block fastener	N. R. Streeter	145, 028	Nov. 25, 1873	748	253	4	573
Last-block fastener	L. S. Wright	142, 603	Sept. 9, 1873	258	85	4	275
Last-block fastening	J. A. Heckenbach and A. Haertle ..	140, 038	June 17, 1873	551	174	3	677
Last-block holder	D. Daniels	141, 123	July 22, 1873	716	238	4	95
Last, Boot and shoe	W. H. Rounds	137, 799	Apr. 15, 1873	484	151	3	421
Last, Boot and shoe	P. Ware, jr.	142, 539	Sept. 2, 1873	195	63	4	257
Last, Form-plate for bottom of shoe ..	J. G. Ross	140, 078	June 17, 1873	585	185	3	679
Last, Shoe	P. P. Paul	145, 124	Dec. 2, 1873	79	25	4	591
Laster, Shank	W. H. Hanna	144, 903	Nov. 25, 1873	639	217	4	564
Laster, Shank	R. B. Perkins	138, 926	May 13, 1873	414	129	3	542
Laster, Shoemaker's shank	J. H. Bean	136, 896	Mar. 18, 1873	494	164	3	303
Lasting boots and shoes	J. Brackett	141, 420	Aug. 5, 1873	9	2	4	136
Lasting boots and shoes	R. C. Lambert	135, 133	Jan. 21, 1873	586	190	3	82
Lasting boots and shoes	J. C. Wightman	136, 476	Mar. 4, 1873	107	36	3	254
Lasting boots and shoes, Machine for ..	C. W. Glidden	136, 317	Feb. 25, 1873	854	275	3	232
Lasting boots and shoes, Machinery for ..	A. C. Carey	146, 043	Dec. 30, 1873	924	300	4	707
Lasting boots and shoes, Machinery for ..	C. H. Trask and H. F. Wheeler ..	142, 657	Sept. 9, 1873	301	99, 100	4	278
Lasting-jack for boots, &c	J. C. Drew	145, 407	Dec. 9, 1873	332	111	4	624
Lasting-machine	C. W. Glidden	135, 111	Jan. 21, 1873	565	184	3	81
Lasting-machine	C. W. Glidden	140, 265	June 24, 1873	763	241	3	702
Lasting-machine, Boot and shoe	C. W. Glidden	135, 539	Feb. 4, 1873	136	42, 43	3	138
Lasting-machine, Boot and shoe	C. W. Glidden	135, 540	Feb. 4, 1873	137	43, 44	3	138
Lasting mechanism	L. R. Blake	143, 322	Sept. 30, 1873	876	300	4	362
Lasting-tool	J. H. Bean	141, 255	July 29, 1873	860	281	4	114
Lasting-tool	L. R. Blake	136, 300	Feb. 25, 1873	841	272	3	231
Lasting-tool	C. W. Glidden	136, 318	Feb. 25, 1873	855	275	3	232
Latch and door check, Combined	R. L. Omensetter	145, 523	Dec. 16, 1873	446	146	4	645
Latch and lock, Combined	A. M. Adams	141, 193	July 29, 1873	797	261	4	109
Latch and lock, Combined	A. J. Hollemback	136, 723	Mar. 11, 1873	337	112	3	281
Latch and lock, Combined	G. Müller	136, 448	Mar. 4, 1873	81	28	3	252
Latch, Door	O. B. Rand	140, 307	June 24, 1873	800	254	3	705
Latch, Door	O. B. Rand	144, 288	Nov. 4, 1873	97	32	4	486
Latch, Door	F. Stowe	144, 931	Nov. 25, 1873	663	225	4	556
Latch, Door-locking	E. Halsey	143, 692	Oct. 14, 1873	273	90	4	411
Latch for coach-door	J. Thielemann	139, 485	June 3, 1873	39	12	3	612
Latch, Gate	J. R. Finley	134, 877	Jan. 14, 1873	352	112	3	48
Latch, Gate	G. N. Sharp	145, 368	Dec. 9, 1873	295	99	4	621
Latch, Gate, &c	C. Roberts	136, 183	Feb. 25, 1873	741	239	3	223
Latch-handle, Door	J. Ambrun and E. Olfermann ..	138, 112	Apr. 22, 1873	769	244	3	453
Latch, Handle-plate for door	F. Corbin	138, 862	May 13, 1873	363	112	3	537
Latch, Knob	J. M. A. Dew	136, 141	Feb. 25, 1873	709	228	3	220

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Latch, Mortise-door.....	W. T. Munger.....	138, 680	May 6, 1873	190	60	3	513
Latch, Reversible.....	W. T. Munger.....	138, 919	May 13, 1873	406	128	3	541
Latch, Reversible knob.....	W. H. Andrews.....	137, 166	Mar. 25, 1873	738	245	3	334
Latch, Reversible knob.....	B. Erbe.....	141, 430	Aug. 5, 1873	18	5	4	136
Latch, Reversible knob.....	C. S. Jennings.....	137, 685	Apr. 8, 1873	369	115	3	398
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Latch, Reversible knob.....	R. L. Webb.....	137, 159	Mar. 25, 1873	732	243	3	333
Latch, Reversible knob.....	A. F. Whiting.....	137, 271	Mar. 25, 1873	837	275	3	341
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Lath-sawing machine.....	S. P. Brower.....	134, 846	Jan. 14, 1873	326	104	3	46
Lath-sawing machine.....	A. Rodgers.....	140, 647	July 8, 1873	276	93	4	42
Lath-sawing machine.....	J. M. Stowell.....	136, 944	Mar. 18, 1873	534	177	3	306
Lathe.....	D. Heer.....	141, 347	July 29, 1873	948	308	4	121
Lathe-boring attachment.....	F. B. Williams.....	138, 460	Apr. 29, 1873	1, 105	349	3	488
Lathe-carrier.....	F. Ferrin.....	137, 298	Apr. 1, 1873	17	5	3	358
Lathe-centering device.....	H. Gray.....	142, 014	Aug. 19, 1873	554	183	4	197
Lathe-dog.....	C. L. Wickham.....	138, 305	Apr. 29, 1873	972	305	3	477
Lathe for turning hubs.....	J. Z. Wagner and H. R. Fry.....	138, 303	Apr. 29, 1873	970	304	3	477
Lathe for turning spools.....	A. T. Wing.....	142, 314	Aug. 26, 1873	828	275	4	229
Lathe for turning tobacco-pipes.....	C. Krapf.....	141, 279	July 29, 1873	880	288	4	116
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Lathe, Watchmaker's.....	E. H. Kelly.....	144, 547	Nov. 11, 1873	326	110	4	516
Lathe, Watchmaker's.....	J. M. Oram.....	143, 458	Oct. 7, 1873	51	18	4	385
Lathe, Watchmaker's.....	C. V. Woerd.....	144, 178	Oct. 28, 1873	735	245	4	468
Lathe, Wood-turning.....	C. A. Blessing.....	137, 999	Apr. 22, 1873	665	{ 211 212 }	3	445
Lathe, Wood-turning.....	J. Chase.....	143, 221	Sept. 30, 1873	788	272	4	355
Lathe, Wood-turning.....	A. R. Park.....	139, 076	May 20, 1873	558	175	3	566
Lathe, Screw-cutting attachment for.....	W. Gleason.....	143, 898	Oct. 21, 1873	472	159	4	437
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Lathe, Tool-holder for.....	L. Reder.....	145, 684	Dec. 16, 1873	583	191	4	656
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Lathing, Metallic.....	C. Welding.....	137, 743	Apr. 8, 1873	428	132	3	403
Lawn or garden sprinkler.....	H. E. Cooke.....	141, 632	Aug. 12, 1873	212	67	4	160
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Lawn-seat.....	W. C. Medcalf.....	142, 927	Sept. 16, 1873	536	183	4	308
Leaching and tanning apparatus.....	C. Korn.....	137, 004	Mar. 18, 1873	584	194	3	310
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Lead, Die for making sheet.....	N. York.....	140, 567	July 1, 1873	193	65	4	24
Lead-drier.....	A. D. Armstrong.....	145, 713	Dec. 23, 1873	619	203	4	671
Lead, Machine for making sheet.....	D. G. Batchelder.....	136, 124	Feb. 25, 1873	689	223	3	219
Lead, Manufacturing white.....	E. A. Boehne.....	142, 199	Aug. 26, 1873	736		4	221
Lead-pencil and rubber-eraser, Combined.....	J. Ilfelder.....	144, 337	Nov. 4, 1873	137	46	4	489
Lead, Process for the manufacture of white.....	A. P. Meylert.....	136, 446	Mar. 4, 1873	80	27	3	252
Leather and similar fabrics, Manufacture of artificial.....	T. J. Mayall.....	140, 209	June 24, 1873	717	226	3	698
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Leather, Bleaching buffed sole.....	H. W. Cottle.....	135, 632	Feb. 11, 1873	235		3	158
Leather board, Manufacture of.....	S. Moore.....	139, 598	June 3, 1873	133		3	620
Leather-boarding machine.....	O. Coogan.....	138, 133	Apr. 22, 1873	785	251	3	454
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Leather-creasing roller.....	S. B. Randall.....	145, 240	Dec. 2, 1873	180	62	4	599
Leather crimping and folding machine.....	R. Platts and J. Walden.....	143, 783	Oct. 21, 1873	376	124	4	429
Leather-cutting machine.....	G. Crocker.....	135, 266	Jan. 28, 1873	726	232	3	106
Leather-cutting machine.....	N. Paquette.....	137, 952	Apr. 15, 1873	610	192	3	431
Leather-cutting tool.....	J. Demarest.....	139, 240	May 27, 1873	722	227	3	587
Leather-dressing compound.....	F. G. Bell.....	135, 310	Jan. 28, 1873	760		3	109
Leather-dressing machine.....	J. A. Enos.....	138, 874	May 13, 1873	372	{ 116 117 }	3	538
Leather, Fabric prepared to imitate.....	H. A. Clark.....	143, 122	Sept. 23, 1873	705		4	332
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Leather, Machine for forming staple seams in.....	S. W. Shorey.....	136, 340	Feb. 25, 1873	875	282	3	234
Leather, Machine for pricking.....	G. C. Converse.....	135, 969	Feb. 18, 1873	537	178	3	195
Leather, Manufacture of.....	G. Rawle and W. N. Evans.....	141, 459	Aug. 5, 1873	45		4	139
Leather-perforating machinery for harness-makers.....	L. D. Woodmansee.....	145, 543	Dec. 16, 1873	466	152	4	647
Leather, Preparing cloth, paper, &c., to imitate.....	H. A. Clark.....	141, 118	July 22, 1873	712		4	94
Leather-preserving composition.....	J. Lamplugh.....	146, 080	Dec. 30, 1873	958		4	709
Leather, Process for manufacture of artificial.....	H. A. Clark.....	141, 116	July 22, 1873	711		4	94
Leather-remnants, Treating.....	B. C. Young.....	135, 615	Feb. 4, 1873	214		3	144
Leather, Removing acids from.....	M. W. Fry.....	144, 328	Nov. 4, 1873	129		4	489
Leather scouring, glassing, or setting machine.....	F. A. Lockwood.....	143, 829	Oct. 21, 1873	414	{ 138 139 }	4	432
Leather-shaving machine.....	D. Y. Haas.....	144, 273	Nov. 4, 1873	87	29	4	485
Leather skiving and splitting machine.....	P. D. Cummings.....	137, 183	Mar. 25, 1873	756	250	3	335
Leather-skiving machine.....	G. Andrews.....	143, 398	Oct. 7, 1873	1	1	4	381
Leather-skiving machine.....	J. H. Chandler.....	139, 493	June 3, 1873	47	15	3	612
Leather-skiving machine.....	E. B. Stimpson.....	138, 951	May 13, 1873	433	136	3	543
Leather-splitting machine.....	J. Goebel and J. Prejs.....	144, 899	Nov. 25, 1873	636	216	4	564
Leather-splitting machine.....	A. F. Stowe.....	139, 744	June 10, 1873	288	89	3	648

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Leather-strap cutting and punching machine.....	J. F. Hollister.....	139,388	May 27, 1873	848	271	3	597
Leather-straps, Clasp for securing the ends of.....	O. O. Storle.....	139,626	June 3, 1873	156	52	3	622
Leather-straps, Machine for waving or embossing.....	D. H. Unger.....	143,477	Oct. 7, 1873	66	23	4	386
Leather-stretching frame.....	C. P. Oliver.....	135,836	Feb. 11, 1873	416	135	3	172
Leather, Tanning.....	R. Blake.....	144,500	Nov. 11, 1873	283	.....	4	513
Leather-trimming device.....	W. F. Foley.....	145,937	Dec. 16, 1873	836	272	4	699
Leather-trimming machine.....	S. H. Jones.....	140,631	July 8, 1873	261	89	4	41
Leather-washer, Annular.....	P. L. Gibbs.....	146,062	Dec. 30, 1873	945	305	4	708
Leather-work, Metal fastening material for.....	C. Keniston.....	145,658	Dec. 16, 1873	560	184	4	655
Leather-work, Seam for.....	C. Keniston.....	142,026	Aug. 19, 1873	566	187	4	198
Leather-work, Seam for.....	S. W. Shorey.....	139,429	May 27, 1873	889	286	3	600
Leather-working tool.....	J. S. Alexander.....	140,336	July 1, 1873	1	1	4	8
Leg, Artificial.....	B. F. Palmer.....	137,711	Apr. 8, 1873	394	122	3	400
Lemon-squeezer.....	A. Bigelow.....	136,023	Feb. 18, 1873	586	193	3	199
Lemon-squeezer.....	J. H. Mead.....	140,785	July 15, 1873	395	135	4	60
Lemon-squeezer.....	E. M. Sammis.....	142,414	Sept. 2, 1873	81	27	4	249
Lemon-squeezer, &c.....	A. Bassford.....	135,067	Jan. 21, 1873	534	173	3	78
Letter-box.....	B. B. Gurley.....	144,976	Nov. 25, 1873	700	236	4	569
Letter-box.....	A. Rosenstjerna.....	141,237	July 29, 1873	841	274	4	112
Letter-box alarm.....	A. Taylor.....	139,833	June 10, 1873	366	114	3	654
Letter-box, Post-office.....	W. H. Taylor.....	141,834	Aug. 12, 1873	387	126	4	174
Letter-box, Street.....	C. L. Evert and A. Johnson.....	136,313	Feb. 25, 1873	849	274	3	232
Letter-clip and paper-binder combined.....	G. W. McGill.....	145,809	Dec. 23, 1873	700	230	4	678
Letter sheet and envelope, Combined.....	T. Orton.....	136,666	Mar. 11, 1873	291	97	3	278
Letters to stone, Securing.....	J. Vennall.....	142,421	Sept. 2, 1873	86	29	4	249
Levees, Inclined way for building.....	J. Bradford.....	140,458	July 1, 1873	95	33	4	16
Level, Grading.....	J. Thornley.....	143,942	Oct. 21, 1873	507	171	4	440
Level, Pendulum.....	A. C. L. Delsarte.....	142,005	Aug. 19, 1873	545	180	4	196
Level, Spirit.....	F. W. Marston.....	140,055	June 17, 1873	565	178	3	678
Lever, &c., Adjusting attachments to reversing.....	G. W. Jordan.....	137,374	Apr. 1, 1873	86	28	3	364
Lever escapement, Detached.....	S. B. Terry.....	140,560	July 1, 1873	188	63	4	23
Lever for drawing framed timber together.....	J. N. Eames.....	142,618	Sept. 9, 1873	270	88	4	276
Lid-lifter.....	W. Van Gaasbeek.....	146,035	Dec. 30, 1873	918	297	4	706
Life-boat.....	J. Adams.....	142,883	Sept. 16, 1873	499	170	4	305
Life-boat.....	E. A. Barrett.....	138,225	Apr. 29, 1873	892	282	3	471
Life-boat.....	W. A. Vail.....	141,609	Aug. 5, 1873	174	55, 56	4	149
Life-preserving cape.....	G. and C. Palmer.....	144,561	Nov. 11, 1873	337	113	4	517
Life-preserving float.....	T. Hosmer.....	136,436	Mar. 4, 1873	72	25	3	251
Life-preserving garment.....	E. R. Cogswell.....	141,631	Aug. 12, 1873	211	66	4	160
Life-preserving mattress.....	H. B. Mountain.....	136,749	Mar. 11, 1873	359	119	3	283
Life-preserving mattress.....	J. J. Woodfine.....	143,313	Sept. 30, 1873	869	297	4	362
Life-raft.....	W. B. Davies.....	135,784	Feb. 11, 1873	363	117	3	168
Life-raft, Float for.....	J. Mason and G. W. Rogers.....	142,801	Sept. 16, 1873	435	146	4	299
Lifting-jack.....	W. F. Arnold.....	134,625	Jan. 7, 1873	115	38	3	16
Lifting-jack.....	W. A. Brunner.....	139,041	May 20, 1873	520	164	3	563
Lifting-jack.....	I. A. Crippen.....	142,680	Sept. 9, 1873	321	107	4	280
Lifting-jack.....	W. M. Doty.....	138,078	Apr. 22, 1873	742	235	3	451
Lifting-jack.....	S. S. Eccleston.....	134,865	Jan. 14, 1873	343	109	3	48
Lifting-jack.....	J. S. Haldeman.....	137,363	Apr. 1, 1873	77	25	3	363
Lifting-jack.....	J. T. Hamilton and E. F. Conner.....	144,977	Nov. 25, 1873	700	236	4	569
Lifting-jack.....	J. H. Hinton.....	135,551	Feb. 4, 1873	147	47	3	139
Lifting-jack.....	D. L. H. Mitchell.....	140,063	June 17, 1873	574	181	3	679
Lifting-jack.....	T. W. H. Moseley.....	136,533	Mar. 4, 1873	163	52	3	258
Lifting-jack.....	D. Putnam.....	142,510	Sept. 2, 1873	169	55	4	255
Lifting-jack.....	J. W. Shankland.....	134,709	Jan. 7, 1873	197	64	3	22
Lifting-jack.....	S. Taylor.....	136,281	Feb. 25, 1873	825	266	3	230
Lifting-jack.....	H. H. Warren.....	138,059	Apr. 22, 1873	728	230	3	450
Lifting-jack, Trammel for.....	E. H. Hake.....	136,156	Feb. 25, 1873	720	233	3	221
Light: See Billiard-light. Deck-light. Drop-light. Head-light. Locomotive head-light. Sky-light. Vault-light.							
Light-house, Floating.....	J. B. Stoner.....	138,292	Apr. 29, 1873	957	301 } 302 }	3	476
Light-house, Floating.....	J. B. Stoner.....	138,293	Apr. 29, 1873	959	302	3	476
Lightning-rod.....	J. Drew.....	145,851	Dec. 23, 1873	736	241	4	681
Lightning-rod.....	W. B. Munn.....	135,574	Feb. 4, 1873	167	54	3	141
Lightning-rod.....	J. S. White.....	143,862	Oct. 21, 1873	445	148	4	435
Lightning-rods, Coupling for tubular.....	J. W. Fritsch.....	145,641	Dec. 16, 1873	546	179	4	654
Lightning-rods, Coupling for tubular.....	J. H. Weston.....	139,841	June 10, 1873	374	116	3	655
Lime for the manufacture of artificial stone, Treatment of.....	J. L. Rowland.....	137,323	Apr. 1, 1873	41	13	3	360
Lime-kiln.....	J. L. Messer.....	142,805	Sept. 16, 1873	436	147	4	299
Lime-kiln.....	L. Montgomery.....	144,555	Nov. 11, 1873	332	112	4	516
Lime-kiln.....	F. W. Raeder.....	135,045	Jan. 21, 1873	516	167	3	77
Lime, Manufacture of superphosphate of.....	B. Tanner.....	140,559	July 1, 1873	186	.....	4	23
Line loop.....	D. McMillan.....	141,804	Aug. 12, 1873	362	119	4	172
Liniment.....	J. Benda.....	138,313	Apr. 29, 1873	979	.....	3	478
Liniment.....	D. J. Gish.....	140,698	July 8, 1873	317	.....	4	45
Liniment.....	H. J. Kintz.....	134,808	Jan. 14, 1873	294	.....	3	44
Liniment.....	M. P. Munder.....	142,499	Sept. 2, 1873	161	.....	4	255
Liniment.....	W. E. Rose.....	137,624	Apr. 8, 1873	314	.....	3	394
Liniment, Piles.....	P. H. Steenbergen.....	141,961	Aug. 18, 1873	508	.....	4	193
Link.....	R. C. Schenck, jr.....	136,550	Mar. 4, 1873	180	58	3	259
Link-motion engine, Reversing.....	T. L. Crowley.....	135,410	Feb. 4, 1873	16	5	3	129
Liquid, Apparatus for drawing effervescent.....	T. Warker.....	144,809	Nov. 18, 1873	551	187	4	546
Liquid cooler.....	H. Meidinger.....	136,445	Mar. 4, 1873	79	27	3	252
Liquid cooler.....	J. R. Neil.....	140,529	July 1, 1873	160	55	4	21
Liquid-cooling coil.....	W. Gee.....	143,689	Oct. 14, 1873	270	89	4	411
Liquid-freezer.....	F. Sajno.....	138,941	May 13, 1873	425	133	3	543
Liquid-measuring register.....	M. Springwater.....	137,155	Mar. 25, 1873	727	242	3	333

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Liquid-meter	T. A. and J. S. Curtis	145,096	Dec. 2, 1873	52	17	4	589
Liquid-meter	F. A. Morley	137,559	Apr. 8, 1873	261	80	3	390
Liquid-meter	A. M. White	136,799	Mar. 11, 1873	400	133	3	287
Liquids, Apparatus for freezing	S. S. Fitch	143,446	Oct. 7, 1873	42	15	4	384
Liquids by means of pipes, Heating	L. Grimm and J. Corvin	138,082	Apr. 22, 1873	745	.....	3	451
Liquids, gases, &c., Meter for measuring	J. J. Greenough	142,336	Sept. 2, 1873	12	5	4	243
Liquids under pressure, Vessel for containing	S. Marks	138,266	Apr. 29, 1873	932	294	3	474
Liquids with carbonic acid, Apparatus for charging	J. Matthews	141,571	Aug. 5, 1873	139	44	4	146
Liquor, Apparatus for improving	C. Wolters and A. Rudigier	138,776	May 13, 1873	286	88	3	531
Liquor-cooler	J. W. Collier	132,478	May 6, 1873	12	4	3	498
Liquors, Apparatus for treating and ageing spirituous	G. Goewey	141,554	Aug. 5, 1873	125	39	4	145
Lithographic press	B. Huber	145,420	Dec. 9, 1873	343	114	4	625
Lithographic press	C. C. Maurice	139,171	May 20, 1873	647	202	3	573
Lithographic printing-form	I. Reynolds	144,796	Nov. 18, 1873	540	183	4	545
Lithographic prints to glass, Process of transferring	O. P. Wolfe	145,472	Dec. 9, 1873	386	.....	4	628
Lithographic stone	G. H. Moore and L. Bagger	141,943	Aug. 19, 1873	494	.....	4	192
Lithographic transferred print	O. P. Wolff	145,606	Dec. 16, 1873	515	.....	4	651
Loading apparatus, Cart	J. Byerly	140,884	July 15, 1873	481	162	4	67
Lock :							
<i>See</i> Bag-lock.							
Berth-lock.							
Combination-lock.							
Door-lock.							
Drawer-lock.							
Fire-arm lock.							
Gun-lock.							
Hasp-lock.							
Hoop lock.							
Indicator-lock.							
Master-key lock.							
Nut-lock.							
Padlock-lock.							
Permutation-lock.							
Row-lock.							
Sash-lock.							
Seal-lock.							
Sewing-machine lock.							
Trunk-lock.							
Lock	C. Bodmer	135,702	Feb. 11, 1873	297	94	3	163
Lock	F. Gorris	142,335	Sept. 2, 1873	12	4	4	243
Lock	H. Stein	145,370	Dec. 9, 1873	297	100	4	622
Lock-cutting machine	I. L. Penney	138,815	May 13, 1873	321	99	3	534
Lock-key, Manufacture of	W. Wilcox	134,577	Jan. 7, 1873	72	22	3	12
Locks, Seal for	F. W. Brooks	141,110	July 22, 1873	707	236	4	94
Locket	S. J. Smith	144,153	Oct. 28, 1873	710	236	4	466
Locomotive	J. S. French	144,271	Nov. 4, 1873	85	28	4	485
Locomotive	W. S. Hudson	136,729	Mar. 11, 1873	342	113	3	282
Locomotive ash-pan cleaner	A. O. Denio	141,769	Aug. 12, 1873	328	108	4	170
Locomotive-boiler, Using anthracite coal dust or slack as fuel in.	A. Berney	136,960	Mar. 18, 1873	545	.....	3	307
Locomotive-engine smoke-stack	R. Frazer	143,339	Sept. 30, 1873	890	305	4	363
Locomotive fire-box crown	H. C. Darby	140,251	June 24, 1873	750	237	3	701
Locomotive furnace	A. J. Stevens	145,819	Dec. 23, 1873	707	233	4	679
Locomotive head-light	W. Westlake	143,550	Oct. 7, 1873	138	46	4	391
Locomotive, portable, and other steam-engines	L. Perkins	145,525	Dec. 16, 1873	448	{ 146 147 }	{ 4 4 }	645
Locomotive recording instrument	J. D. Richardson	138,437	Apr. 29, 1873	1,084	{ 342 343 }	{ 3 3 }	487
Locomotive sanding-device	M. V. Nobles	137,472	Apr. 1, 1873	174	55	3	271
Locomotive smoke and spark conveyer	E. A. C. Fox	142,906	Sept. 16, 1873	518	176	4	306
Locomotive smoke-stack	J. V. Bishop	144,884	Nov. 25, 1873	627	213	4	563
Locomotive smoke-stack	J. Hughes	142,851	Sept. 16, 1873	474	161	4	303
Locomotive, Traction	T. S. Minniss	135,240	Jan. 28, 1873	704	226	3	104
Locomotive window	J. H. Dinsmore	145,790	Dec. 23, 1873	685	224	4	677
Locomotives, Machine for slotting links for	W. H. Denney	140,121	June 24, 1873	644	202	3	692
Log-canting machine	A. Rodgers	142,280	Aug. 26, 1873	801	265	4	227
Log-moving machine	G. M. Hinkley and A. Rodgers	139,578	June 3, 1873	115	39	3	618
Log-rolling device	T. Emery	136,145	Feb. 25, 1873	712	230	3	221
Log-turner	J. C. Moore	138,270	Apr. 29, 1873	937	296	3	475
Log-turner	I. W. Pool	140,386	July 1, 1873	44	15	4	11
Log-turner	E. Tarrant	141,736	Aug. 12, 1873	297	97	4	167
Log-turner	J. Torrent	141,739	Aug. 12, 1873	299	98	4	167
Log-turner	C. Van Vleck	141,969	Aug. 19, 1873	513	169	4	194
Loom	A. Canis and F. Higgins	136,133	Feb. 25, 1873	699	{ 226 227 }	{ 3 3 }	220
Loom	G. Crompton	140,894	July 15, 1873	489	165	4	67
Loom	H. D. Davis	141,262	July 29, 1873	865	{ 283 284 }	{ 4 4 }	114
Loom	J. C. Duckworth	137,898	Apr. 15, 1873	566	{ 177 178 }	{ 3 3 }	427
Loom	C. J. Kane	137,077	Mar. 25, 1873	665	220	3	328
Loom	L. J. Knowles	134,992	Jan. 21, 1873	464	{ 149 150 }	{ 3 3 }	72
Loom	S. T. Thomas	134,572	Jan. 7, 1873	66	20, 21	3	12
Loom	S. T. Thomas	145,316	Dec. 9, 1873	254	85	4	618
Loom	J. Zürcher	141,907	Aug. 19, 1873	467	153	4	190
Loom beam and roller	G. L. Garsed	137,672	Apr. 8, 1873	359	111	3	397
Loom-filling fork	J. H. Knowles	139,251	May 27, 1873	732	231	3	588
Loom for weaving piled fabric	E. Pickford	139,328	May 27, 1873	796	254	3	593
Loom for weaving piled fabrics	H. Skinner	146,101	Dec. 30, 1873	979	{ 316 317 }	{ 4 4 }	711
Loom for weaving piled fabrics	J. C. Ellison	144,077	Oct. 28, 1873	649	214	4	461
Loom for weaving slats, window-shades, &c.	E. B. Hastings, W. E. Nichols, and W. L. Merritt	135,427	Feb. 4, 1873	32	9	3	130
Loom, Hair-cloth	J. Turpie	139,981	June 17, 1873	497	157	3	672

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Loom let-off mechanism	C. Gahren and L. Langlotz	138, 391	Apr. 29, 1873	1, 040	328	3	483
Loom let-off mechanism	J. M. Linscott	141, 720	Aug. 12, 1873	283	93	4	166
Loom, Machine for shaping the elastic dents of comb for	M. Robinson	135, 444	Feb. 4, 1873	48	15, 16	3	131
Loom, Narrow-ware	R. B. Fowler	144, 610	Nov. 18, 1873	384	129	4	532
Loom-picker	S. Boorn	143, 218	Sept. 30, 1873	784	271	4	354
Loom-picker	O. A. Sawyer	145, 905	Dec. 23, 1873	787	257	4	685
Loom-picker	W. Taylor	135, 253	Jan. 28, 1873	716	229	3	105
Loom-picking mechanism	L. E. Ross	137, 798	Apr. 15, 1873	483	151	3	420
Loom-picking mechanism	L. E. Ross	143, 257	Sept. 30, 1873	822	282	4	358
Loom-picking mechanism	W. Stearns	142, 592	Sept. 9, 1873	249	82	4	274
Loom-picking mechanism	J. Stever	140, 091	June 17, 1873	598	189	3	680
Loom-picking mechanism	A. Stockwell	136, 786	Mar. 11, 1873	390	129	3	286
Loom-picking mechanism	T. Townsend	141, 187	July 22, 1873	783	256	4	100
Loom-picking stick-check	R. Davis	141, 496	Aug. 5, 1873	78	25	4	141
Loom, Power	J. Shinn	137, 252	Mar. 25, 1873	820	269	3	340
Loom-shedding mechanism	G. Crompton	140, 476	July 1, 1873	113	38	4	17
Loom-shedding mechanism	G. Crompton	140, 682	July 8, 1873	304	102	4	44
Loom-shedding mechanism	G. Crompton	141, 768	Aug. 12, 1873	326	107	4	170
Loom-shedding mechanism	C. H. Landenberger and H. Atkinson	145, 216	Dec. 2, 1873	159	55	4	598
Loom-shedding mechanism	J. Lomas	137, 937	Apr. 15, 1873	597	188	3	430
Loom-shedding mechanism	E. Redfearn	141, 589	Aug. 5, 1873	152	49	4	147
Loom-shedding mechanism	I. L. Wilber	144, 176	Oct. 28, 1873	733	{ 244 } 245	4	468
Loom-shuttle	E. P. Ball	145, 831	Dec. 23, 1873	717	236	4	680
Loom-shuttle	F. and A. J. Blanding	134, 971	Jan. 21, 1873	447	143	3	71
Loom-shuttle	J. Brown	142, 373	Sept. 2, 1873	46	16	4	246
Loom-shuttle	H. H. Bryant	134, 848	Jan. 14, 1873	328	105	3	46
Loom-shuttle	N. D. Chapman	144, 657	Nov. 18, 1873	426	144	4	536
Loom-shuttle	D. C. G. Field	136, 715	Mar. 11, 1873	330	109	3	281
Loom-shuttle	M. F. Fields	143, 976	Oct. 28, 1873	562	186	4	454
Loom-shuttle	T. Martin	135, 652	Feb. 11, 1873	251	79	3	159
Loom-shuttle	T. K. McIntyre	141, 803	Aug. 12, 1873	361	119	4	172
Loom-shuttle	C. L. F. Pfefferkorn and W. Aust	143, 927	Oct. 21, 1873	495	167	4	439
Loom-shuttle	C. K. Sawyer and G. F. Wright	135, 446	Feb. 4, 1873	51	17	3	131
Loom-shuttle	W. Tucker	140, 098	June 17, 1873	604	190	3	681
Loom, Shuttle-actuating mechanism for	J. R. Norfolk	144, 218	Nov. 4, 1873	43	13	4	481
Loom-shuttle binder	G. B. Hammond and J. A. Tucker	138, 020	Apr. 22, 1873	688	217	3	447
Loom, Shuttle-box mechanism for	W. Atkinson and C. C. Klein	135, 748	Feb. 11, 1873	333	107	3	166
Loom, Shuttle-box mechanism for	R. B. Goodyear	139, 384	May 27, 1873	842	269	3	597
Loom-shuttle guard	C. H. Hudson	137, 551	Apr. 8, 1873	255	78	3	389
Loom-shuttle guard	E. M. Stevens	145, 763	Dec. 23, 1873	665	217	4	675
Loom-shuttle guide	J. B. Bancroft	134, 837	Jan. 14, 1873	320	102	3	46
Loom-shuttle guide	J. B. Bancroft	145, 925	Dec. 30, 1873	825	269	4	698
Loom-shuttle motion	A. Gartenmann	136, 501	Mar. 4, 1873	129	42	3	256
Loom-shuttle relief mechanism	W. C. Macomber	145, 882	Dec. 23, 1873	766	250	4	683
Loom-stop mechanism	C. E. Barnes	138, 987	May 20, 1873	475	149	3	560
Loom-stop mechanism	W. Edson	139, 560	June 3, 1873	102	34	3	617
Loom-stop mechanism	T. Isherwood and W. Nuttall	138, 883	May 13, 1873	388	121	3	539
Loom-stop mechanism	J. J. Switzer	136, 880	Mar. 18, 1873	479	159	3	302
Loom-stop mechanism	H. F. Wheeler and W. O. Wakefield	143, 552	Oct. 7, 1873	139	46	4	391
Loom-stopping mechanism	L. J. Knowles	142, 401	Sept. 2, 1873	72	24	4	248
Loom-temple	N. I. Allen and E. S. Stimpson	144, 647	Nov. 18, 1873	421	141	4	535
Loom-temple	N. Chapman	138, 004	Apr. 22, 1873	672	213	3	445
Loom-temple	N. Chapman	140, 013	June 17, 1873	524	166	3	674
Loom temple	N. Chapman	144, 507	Nov. 11, 1873	288	98	4	513
Loom-temple	F. J. Dutcher	136, 644	Mar. 11, 1873	274	91	3	276
Loom-temple	W. W. Dutcher	139, 884	June 17, 1873	421	131	3	666
Loom-temple	E. S. Stimpson	139, 929	June 17, 1873	459	144	3	669
Loom, Wire-weaving	S. Holdsworth	138, 090	Apr. 22, 1873	753	238	3	452
Looms, &c., Electrical stop for	G. F. Lufbery	142, 925	Sept. 16, 1873	534	182	4	308
Looms, Take-up mechanism for	S. Estes	137, 188	Mar. 25, 1873	761	251	3	336
Looms, Take-up mechanism for	C. Gahren	144, 756	Nov. 18, 1873	508	172	4	542
Lounge	W. H. Hart	143, 283	Sept. 30, 1873	842	290	4	359
Lounge	A. Heyer	145, 418	Dec. 9, 1873	341	114	4	625
Lounge	F. Krater	134, 752	Jan. 14, 1873	243	79	3	40
Lounge and bath-tub, Combined	C. Wendel	138, 457	Apr. 29, 1873	1, 103	348	3	488
Lounge and bedstead, Combined	S. Higgins	139, 957	June 17, 1873	480	151	3	670
Lounge and chair, Combined	M. P. Robinson	145, 452	Dec. 9, 1873	366	122	4	627
Lounge, Folding	A. Lundberg	136, 843	Mar. 18, 1873	449	149	3	300
Lounge, Leg for folding	J. F. Tobey	138, 716	May 6, 1873	224	70	3	515
Lowering and hoisting apparatus, Self-breaking	W. Hart	142, 017	Aug. 19, 1873	556	184	4	197
Low-water alarm and indicator	J. Ross	137, 097	Mar. 25, 1873	679	226	3	329
Low-water alarm, Steam-boiler	J. R. Brown and W. A. Foskett	135, 519	Feb. 4, 1873	111	36	3	136
Low-water indicator	F. Steele	145, 369	Dec. 9, 1873	296	100	4	622
Low-water indicator and alarm	F. Strange	142, 181	Aug. 26, 1873	720	238	4	220
Low-water indicator and alarm for boiler	M. Ellwood	136, 646	Mar. 11, 1873	275	92	3	276
Lozenge-cutting machine	G. H. Copping	144, 258	Nov. 4, 1873	76	24, 25	4	484
Lubricating compound	H. R. Hutchinson	134, 890	Jan. 14, 1873	364	.....	3	49
Lubricating compound	S. Y. Love	143, 362	Sept. 30, 1873	919	.....	4	365
Lubricating compound	J. B. Norris	145, 812	Dec. 23, 1873	702	.....	4	678
Lubricating compound	E. Roat	136, 868	Mar. 18, 1873	468	.....	3	301
Lubricating compound	N. D. Smith	144, 875	Nov. 25, 1873	621	.....	4	562
Lubricating compound	E. A. Tonner	136, 945	Mar. 18, 1873	535	.....	3	306
Lubricating cup	T. Cooper	138, 558	May 6, 1873	82	26	3	504
Lubricator:							
See Axle-lubricator.							
Car-axle lubricator.							
Cylinder-lubricator.							
Steam-lubricator.							
Steam-engine lubricator.							
Valve-lubricator.							
Wheel-lubricator.							

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Lubricator.....	H. V. Aiken.....	139,256	May 27, 1873	765	242	3	590
Lubricator.....	B. F. Cleminshaw.....	135,777	Feb. 11, 1873	358	115	3	168
Lubricator.....	J. Gates.....	138,243	Apr. 29, 1873	907	286	3	473
Lubricator.....	F. Lunkenheimer and J. Meehan.....	138,169	Apr. 22, 1873	815	259	3	457
Lubricator.....	E. McCoy.....	139,407	May 27, 1873	871	279	3	599
Lubricator.....	W. Morris.....	138,341	Apr. 29, 1873	1,001	315	3	480
Lubricator.....	J. A. Osenbrück.....	138,274	Apr. 29, 1873	940	297	3	475
Lubricator.....	J. M. Power.....	134,611	Jan. 7, 1873	105	34	3	15
Lubricator.....	J. M. Power.....	143,639	Oct. 14, 1873	221	74	4	407
Lubricator.....	W. A. Pratt.....	143,530	Oct. 7, 1873	114	39	4	390
Lubricator.....	D. T. Pray.....	141,168	July 22, 1873	763	250	4	98
Lubricator.....	H. W. Regan.....	138,436	Apr. 29, 1873	1,083	342	3	486
Lubricator.....	J. Ross.....	143,422	Oct. 7, 1873	24	9	4	382
Lumber, Cutter for tonguing and grooving.....	D. Perrin.....	137,861	Apr. 15, 1873	535	167	3	425
Lumber-drier.....	A. Edwards.....	134,529	Jan. 7, 1873	25	8	3	9
Lumber-edging machine.....	W. G. Caldwell.....	141,852	Aug. 19, 1873	410	134	4	186
Lumber for joiner's use, Prepared.....	J. Mullay.....	136,332	Feb. 25, 1873	868	279	3	233
Lumber-marker.....	W. Merritt.....	143,773	Oct. 21, 1873	367	121	4	428
Lumber-trimming machine.....	C. Lamb and T. J. Frazier.....	138,505	May 6, 1873	30	10	3	500
Lunch-box.....	C. E. Lockwood.....	135,651	Feb. 11, 1873	251	79	3	159
Lunch-box and shopping-bag, Combined.....	C. C. Cobleigh.....	144,385	Nov. 11, 1873	189	64, 65	4	505
M.							
Machinery, Apparatus for preventing rapping noise in.....	G. Ames.....	139,227	May 27, 1873	707	223	3	586
Machinery, Register for.....	S. F. Payne.....	144,861	Nov. 25, 1873	611	208	4	561
Machinists' gage.....	S. H. Bellows.....	142,761	Sept. 16, 1873	402	136	4	297
Magnet, Relay.....	T. A. Edison.....	141,777	Aug. 12, 1873	335	110	4	170
Magnet, Reversible.....	J. L. Churchill.....	135,690	Feb. 11, 1873	287	91	3	162
Magnesia, Making hydrate or milk of.....	C. L. Phillips and L. Reid.....	141,167	July 22, 1873	761	.....	4	98
Mail-bag.....	T. J. Hardaway.....	139,061	May 20, 1873	542	170	3	565
Mail-bag fastening.....	B. X. Blair.....	139,536	June 3, 1873	77	26	3	615
Mail-bag fastening.....	J. A. Paul.....	140,639	July 8, 1873	270	91	4	42
Mail-bag fastening.....	W. J. Stowell.....	134,571	Jan. 7, 1873	65	20	3	12
Mail pouch holder and catcher, Railway.....	B. F. Bean.....	143,657	Oct. 14, 1873	236	80	4	408
Main: See Water-main.							
Mallet.....	A. Holbrook.....	141,930	Aug. 19, 1873	485	160	4	191
Mallet.....	S. M. Willis.....	140,395	July 1, 1873	49	17	4	12
Mallet for driving tubes, &c.....	C. Stewart.....	145,537	Dec. 16, 1873	461	151	4	646
Malt-drier.....	J. G. Schiffer.....	146,025	Dec. 30, 1873	912	295	4	705
Malt-drier.....	P. Schuff.....	142,946	Sept. 16, 1873	554	188	4	309
Malt-kiln.....	J. Gecmen.....	137,194	Mar. 25, 1873	769	254	3	336
Malt-kiln stirrer.....	E. Schmidt.....	138,288	Apr. 29, 1873	955	300	3	476
Malt-polishing machine.....	C. Stoll.....	140,316	June 24, 1873	810	256	3	706
Malt-polishing machine.....	W. W. Stoll.....	145,027	Nov. 25, 1873	747	252	4	573
Malt-steep.....	W. W. Stoll.....	143,938	Oct. 21, 1873	504	170	4	439
Manhole-cover, Device for securing.....	J. J. Craven.....	140,893	July 15, 1873	488	165	4	67
Mandrel, Buffing.....	G. B. Dunham.....	137,187	Mar. 25, 1873	760	251	3	335
Mandrel, Buffing.....	N. S. Thompson.....	141,523	Aug. 5, 1873	98	30	4	143
Mandrel, Expanding.....	J. D. Smith.....	138,947	May 13, 1873	430	135	3	543
Mandrel, Tube-welding.....	H. K. Flagler.....	142,622	Sept. 9, 1873	273	89	4	276
Manganese, ferro-manganese, and spiegeleisen, Manufacture of.....	O. Bolton, jr.....	141,419	Aug. 5, 1873	8	.....	4	135
Manger, Automatic.....	D. A. Townsend.....	136,192	Feb. 25, 1873	748	241	3	223
Manger, Horse.....	J. C. Higgins.....	134,601	Jan. 7, 1873	98	31	3	15
Mangle.....	R. A. Duncan.....	142,997	Sept. 23, 1873	603	205	4	324
Mangle.....	E. Gundlach.....	144,671	Nov. 18, 1873	435	147	4	536
Mangling or wringing machine.....	T. Hall and J. Newton.....	139,574	June 3, 1873	112	37	3	618
Mantel, False.....	J. T. Fleeharty.....	139,137	May 20, 1873	614	192	3	570
Map, Dissected.....	C. J. Higgins.....	142,338	Sept. 2, 1873	14	5	4	243
Map-exhibitor and cabinet.....	W. A. and G. Rice.....	143,717	Oct. 14, 1873	298	98, 99	4	413
Marble, Artificial.....	B. Auguste.....	140,668	July 8, 1873	291	.....	4	43
Marble, granite, &c., Process for cleaning.....	J. Sawyer.....	145,971	Dec. 30, 1873	868	.....	4	702
Marble, Machine for molding.....	J. Finn.....	134,532	Jan. 7, 1873	27	9	3	9
Marble, Making artificial.....	C. F. Barker.....	141,689	Aug. 12, 1873	261	.....	4	164
Marble-molding machine.....	J. Finn.....	141,213	July 29, 1873	821	268	4	111
Marble, Process of manufacturing and veining artificial.....	F. H. Hall.....	145,345	Dec. 9, 1873	279	.....	4	620
Marble slabs, Machine for molding the edges of.....	J. Finn.....	138,079	Apr. 22, 1873	743	235	3	451
Marine drag.....	J. C. Beals.....	143,318	Sept. 30, 1873	873	299	4	362
Marker, Corn-ground.....	J. H. Rynerson.....	144,146	Oct. 28, 1873	704	234	4	466
Marker, Corn-row.....	A. Cooke and D. W. Cross.....	139,546	June 3, 1873	86	30	3	616
Marker, Land.....	G. W. Betts.....	141,913	Aug. 19, 1873	472	155	4	190
Marker, Land.....	J. Cuff.....	135,965	Feb. 11, 1873	292	92	3	162
Marker, seed-planter, and cultivator.....	C. H. and F. Logan.....	145,220	Dec. 2, 1873	163	56	4	598
Martingale.....	R. R. Miller.....	135,657	Feb. 11, 1873	255	81	3	160
Martingale.....	F. G. Moody.....	142,261	Aug. 26, 1873	786	259	4	226
Mason's hod.....	B. C. Monroe.....	145,675	Dec. 16, 1873	575	189	4	656
Mast for vessels, Hinged.....	J. E. Hammond.....	145,648	Dec. 16, 1873	552	181	4	654
Master-key lock.....	A. Rankin.....	141,381	July 29, 1873	979	318	4	123
Mastic, Composition.....	A. Thiele.....	142,595	Sept. 9, 1873	251	.....	4	274
Mat: See Rubber-mat.							
Match-box.....	J. Holtz.....	141,793	Aug. 12, 1873	354	116	4	171
Match-box.....	J. Matthias.....	144,404	Nov. 11, 1873	204	69	4	506
Match-box.....	A. Meyersberg.....	141,581	Aug. 5, 1873	146	47	4	147
Match-box.....	M. L. Örum.....	144,283	Nov. 4, 1873	94	31	4	486
Match-box.....	O. Paddock.....	134,764	Jan. 14, 1873	252	82	3	41
Match-box.....	C. Pahl.....	140,949	July 15, 1873	548	184	4	72
Match-composition.....	J. F. Babcock, W. A. Leonard, and E. B. Crane.....	136,953	Mar. 18, 1873	541	.....	3	307
Match-cutting machine.....	E. D. Cummings, M. Smith, and J. C. Jordan.....	139,457	June 3, 1873	11	3, 4	3	610
Match-cutting machine.....	T. G. Murphy.....	134,565	Jan. 7, 1873	59	18	3	12
Match-safe.....	L. Darozir.....	134,523	Jan. 7, 1873	19	6	3	9
Match-safe.....	J. and A. Helm.....	144,615	Nov. 18, 1873	390	131	4	533
Match-safe.....	C. H. Leggett.....	138,261	Apr. 29, 1873	928	293	3	474
Match-sticks, Machine for making.....	F. Zaiss.....	136,893	Mar. 18, 1873	491	163	3	303

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Matches, Manufacture of friction.....	C. F. Bonhack.....	141,483	Aug. 5, 1873	64	20	4	140
Matches, Manufacturing.....	O. H. Hicks.....	137,840	Apr. 15, 1873	520		3	423
Matter, Treating refuse.....	C. Whittier.....	143,482	Oct. 7, 1873	69	24	4	386
Mattress.....	T. Roller.....	137,030	Mar. 18, 1873	608	201	3	312
Mattress.....	H. E. Smith.....	139,202	May 20, 1873	675	212	3	576
Mattress-frame, Elastic fabric.....	J. E. Whittlesey and J. W. C. Peters.....	142,827	Sept. 16, 1873	455	154	4	301
Mattress-frame, Wire.....	G. V. and W. I. Bunker.....	145,553	Dec. 16, 1873	474	155	4	648
Mattress-frame, Wire.....	J. G. Smith.....	136,271	Feb. 25, 1873	816	263	3	229
Mattress-frame, Woven-wire.....	D. J. Powers.....	136,180	Feb. 25, 1873	739	238	3	223
Mattress, seat, &c., Flexible support for.....	C. Pullinger.....	137,718	Apr. 8, 1873	404	124	3	401
Mattress, seat, &c., Spring-coupling for.....	W. B. Judson.....	134,893	Jan. 14, 1873	368	117	3	49
Mattress, Spring.....	H. A. Gaston.....	137,673	Apr. 8, 1873	360	112	3	398
Mattress, Spring.....	D. N. Sellig.....	145,597	Dec. 16, 1873	508	167	4	650
Mattress-stuffing, &c., Process for preparing moss for.....	A. Rock.....	134,562	Jan. 7, 1873	57		3	11
Mattresses, Tightening device for woven-wire.....	D. J. Powers.....	142,940	Sept. 16, 1873	550	186	4	309
Mattress, Wire.....	E. Parker.....	139,077	May 20, 1873	560	175	3	566
Mattress, Wire.....	D. J. Powers.....	144,564	Nov. 11, 1873	339	114	4	517
Mattress, Wire.....	J. G. Smith.....	145,249	Dec. 2, 1873	189	65	4	600
Measure and register, Grain.....	R. B. Clark.....	136,643	Mar. 11, 1873	272	91	3	276
Measure, Cloth.....	C. V. Hemenway.....	135,804	Feb. 11, 1873	391	126	3	170
Measure, Hatter's head.....	F. A. Fenton.....	144,606	Nov. 18, 1873	381	128	4	532
Measure, Liquid.....	W. L. Wever and A. W. Johnson.....	145,377	Dec. 9, 1873	303	102	4	622
Measure, Lumber.....	F. S. Baldwin.....	138,310	Apr. 29, 1873	976	307	3	478
Measure, Tailor's.....	J. Beaudry.....	143,556	Oct. 14, 1873	152	51	4	401
Measure, Tailor's.....	J. A. Johnston.....	140,507	July 1, 1873	141	48	4	20
Measure, Tape.....	H. B. Tyler.....	140,745	July 8, 1873	359	121	4	49
Measurement, Apparatus for electric.....	L. Bradley.....	134,636	Jan. 7, 1873	128	41	3	17
Measuring-can.....	A. W. Tice and N. F. Smalley.....	144,713	Nov. 18, 1873	471	159	4	539
Measuring-can, Oil, &c.....	W. B. Sherman.....	136,103	Feb. 18, 1873	655	214	3	204
Measuring-device, Cloth.....	O. R. Holbrook.....	142,787	Sept. 16, 1873	424	143	4	298
Measuring-funnel.....	T. E. Cropper.....	137,182	Mar. 25, 1873	755	250	3	335
Measuring-register, Cloth.....	S. Crocker.....	137,829	Apr. 15, 1873	507	158	3	422
Measuring-rod and divider, Combined extension.....	G. H. Discher.....	144,264	Nov. 4, 1873	80	26	4	484
Measuring-wheel.....	T. R. Way.....	135,185	Jan. 21, 1873	627	204	3	86
Measuring-wheel for wagon-tires.....	T. Whiting.....	138,829	May 13, 1873	333	102	3	535
Meat and vegetable cutter.....	M. L. Edwards.....	139,501	June 3, 1873	51	16	3	613
Meat and vegetable cutter.....	J. R. Hall and C. H. Ellis.....	140,824	July 15, 1873	431	146 147	4	63
Meat-chopper.....	J. Battey.....	135,258	Jan. 28, 1873	720	230	3	105
Meat-chopper.....	O. Gardner.....	140,696	July 8, 1873	316	107	4	45
Meat-chopper.....	J. A. Hard.....	137,074	Mar. 25, 1873	661	219	3	328
Meat-chopper.....	H. P. Rankin.....	140,950	July 15, 1873	548	184	4	72
Meat-chopper.....	A. R. Silver.....	141,731	Aug. 12, 1873	292	95	4	167
Meat-chopping machine.....	G. Spiehlman.....	136,624	Mar. 11, 1873	258	87	3	275
Meat-crusher.....	A. J. Crane.....	135,781	Feb. 11, 1873	361	116	3	168
Meat, Curing and packing.....	I. Atkinson.....	134,965	Jan. 21, 1873	440		3	71
Meat-holder.....	S. Beissel.....	145,329	Dec. 9, 1873	267	89	4	619
Meat-mangle.....	S. D. Ingham.....	143,158	Sept. 23, 1873	729	251	4	334
Meat or fruit press.....	L. S. Starrett.....	137,803	Apr. 15, 1873	487	152	3	421
Meat-press.....	J. I. Danforth.....	144,322	Nov. 4, 1873	124	41	4	488
Mechanical power.....	E. W. Morton.....	136,088	Feb. 18, 1873	641	210	3	203
Mechanical power.....	C. Van Derzee.....	141,741	Aug. 12, 1873	300	98	4	167
Medical compound for neutralizing the taste of cod-liver oil.....	C. D. Bradley.....	141,030	July 22, 1873	636		4	88
Medicated candy.....	S. B. Colton.....	134,979	Jan. 21, 1873	453		3	72
Medicated pad or belt.....	A. F. Cooper.....	144,315	Nov. 4, 1873	117	40	4	488
Medicated paper.....	C. J. Eames.....	134,983	Jan. 21, 1873	457		3	72
Medicine.....	J. P. Barnett.....	143,399	Oct. 7, 1873	2		4	381
Medicine.....	A. Brown.....	138,473	May 6, 1873	7		3	498
Medicine.....	J. Conzelman.....	139,045	May 20, 1873	522		3	563
Medicine.....	G. Déclat.....	145,850	Dec. 23, 1873	735		4	681
Medicine.....	S. Field.....	145,560	Dec. 16, 1873	479		4	648
Medicine.....	A. Fuqua.....	140,408	July 1, 1873	58		4	13
Medicine.....	H. Gahn.....	137,542	Apr. 8, 1873	247		3	388
Medicine.....	T. Morley.....	134,762	Jan. 14, 1873	251		3	41
Medicine.....	G. F. Munro.....	145,002	Nov. 25, 1873	723		4	571
Medicine.....	S. E. Paddock.....	142,408	Sept. 2, 1873	77		4	248
Medicine.....	J. L. Putegnat.....	136,937	Mar. 18, 1873	529		3	306
Medicine.....	H. Themel.....	736,680	Mar. 11, 1873	303		3	279
Medicine.....	T. T. Wright.....	140,866	July 15, 1873	465		4	65
Medicine and apparatus for cure of asthma.....	J. Pinchard.....	137,093	Mar. 25, 1873	676	225	3	329
Medicine and medicated food.....	J. M. O. Tamin.....	136,678	Mar. 11, 1873	302		3	278
Medicine, Bitters.....	L. Kappler.....	145,062	Dec. 2, 1873	20		4	587
Medicine, Bitters for chills and fever.....	T. B. Owens.....	139,185	May 20, 1873	660		3	574
Medicine, Blood-purifier.....	D. Parlow.....	138,759	May 13, 1873	272		3	529
Medicine-case.....	M. O. Baldwin.....	142,887	Sept. 16, 1873	502	171	4	305
Medicine-case.....	W. H. Cutler.....	136,973	Mar. 18, 1873	557	185	3	308
Medicine, Catarrh.....	J. A. Carpenter.....	135,077	Jan. 21, 1873	540		3	79
Medicine, Catarrh.....	W. V. Green and J. M. Kintzel.....	139,951	June 17, 1873	475		3	670
Medicine, Cholera.....	A. Racicot.....	140,642	July 8, 1873	272		4	42
Medicine, Consumption.....	W. H. H. White.....	140,329	June 24, 1873	823		3	707
Medicine, Diphtheria.....	H. Pruden.....	140,163	June 24, 1873	680		3	695
Medicine, Fever and ague.....	W. Campbell.....	134,639	Jan. 7, 1873	131		3	17
Medicine for kidney diseases.....	W. A. Ruth.....	137,488	Apr. 1, 1873	193		3	373
Medicine for skin diseases.....	A. B. Simpson.....	136,554	Mar. 4, 1873	183		3	260
Medicine for treating horses' hoofs, &c.....	J. C. Burroughs.....	145,047	Dec. 2, 1873	5		4	586
Medicine, Horse, &c.....	J. Andrews.....	134,721	Jan. 14, 1873	221		3	38
Medicine, Infant's.....	J. Fehr.....	143,133	Sept. 23, 1873	712		4	332
Medicine, Liver disease.....	J. M. Cunningham.....	139,707	June 10, 1873	253		3	645
Medicine, Milk of magnesia.....	C. H. Phillips and L. Reid.....	138,282	Apr. 29, 1873	947		3	476
Medicine or eye-wash.....	F. Pawlewski and J. Schulz.....	145,749	Dec. 23, 1873	650		4	674
Medicine or liver-lozenge.....	S. Gilbert.....	145,498	Dec. 16, 1873	416		4	643
Medicine or opium-cure.....	N. H. Kellogg.....	143,164	Sept. 23, 1873	733		4	334
Medicine or skin-lotion.....	A. Field.....	140,126	June 24, 1873	648		3	692
Medicine or stomach-bitters.....	F. Stützel.....	143,427	Oct. 7, 1873	29		4	383

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Medicine, Rheumatism.....	G. Lucy.....	138,335	Apr. 29, 1873	996		3	479
Mensuration, Apparatus for teaching.....	J. Harrington.....	137,075	Mar. 25, 1873	662	{ 219 220 }	3	328
Metal, Anti-friction.....	G. S. Hunt.....	136,163	Feb. 25, 1873	725	.....	3	222
Metal bars, Machine for bending and twisting.....	S. Holmes.....	142,018	Aug. 19, 1873	557	{ 184 185 }	4	197
Metal bars, Machine for breaking.....	W. Richter.....	135,364	Jan. 28, 1873	813	{ 262 263 }	3	113
Metal can for oil, &c.....	G. W. Banker.....	138,986	May 20, 1873	474	149	3	560
Metal-cleaning compound.....	W. Z. Moore.....	144,215	Nov. 4, 1873	41	.....	4	481
Metal-coated ware.....	G. Booth.....	136,025	Feb. 18, 1873	587	.....	3	199
Metal, Coloring.....	J. Kintz.....	139,319	May 27, 1873	790	.....	3	592
Metal-drilling machine.....	A. Woodworth.....	145,923	Dec. 23, 1873	801	{ 262 263 }	4	686
Metal, &c., Furnace for reheating.....	H. Chisholm.....	136,413	Mar. 4, 1873	52	18, 19	3	250
Metal-melting furnace.....	J. Harrison.....	141,139	July 22, 1873	732	243	4	96
Metal pipe, roofing, &c., Composition for coating.....	J. Specht.....	134,822	Jan. 14, 1873	308	.....	3	45
Metal-rolling machinery.....	W. George and W. F. Durfee.....	139,000	May 20, 1873	487	154	3	561
Metal-separator.....	S. J. Peet.....	138,276	Apr. 29, 1873	942	297	3	475
Metal tube, Apparatus for brazing.....	T. G. Gorman and N. W. Peregoy.....	137,068	Mar. 25, 1873	654	217	3	328
Metal-working machine, Compound.....	G. L. Jones.....	142,398	Sept. 2, 1873	70	23	4	248
Metal-working machine, Compound.....	H. B. Sevey.....	142,588	Sept. 9, 1873	245	81	4	273
Metal-working machine, Compound.....	H. B. Sevey.....	143,722	Oct. 14, 1873	304	100	4	413
Metals, Apparatus for testing the tensile strength of.....	T. Olsen.....	142,937	Sept. 16, 1873	547	186	4	309
Metals, Compound for cleaning polished.....	M. McGlenn.....	141,156	July 22, 1873	751	.....	4	97
Metals in liquid state, Apparatus for compressing cast.....	H. W. Barnum.....	145,325	Dec. 9, 1873	264	88	4	619
Metallic-band, Machine for re-rolling.....	C. W. Chapman.....	136,585	Mar. 11, 1873	225	75	3	272
Metallic bars, tubes, &c., Furnace for heating.....	S. P. M. Tasker.....	135,674	Feb. 11, 1873	273	86	3	161
Metallic bracket.....	A. D. Judd.....	145,351	Dec. 9, 1873	284	95	4	620
Metallic can for meat, paint, &c.....	E. M. Wood.....	136,890	Mar. 18, 1873	488	162	3	303
Metallic clasp.....	C. Marshall.....	140,207	June 24, 1873	716	226	3	698
Metallic fabric for scouring and percolating purposes.....	A. J. Vandegrift.....	134,619	Jan. 7, 1873	110	36	3	16
Metallic molds, Process in casting in.....	J. Williams.....	138,775	May 13, 1873	286	.....	3	531
Metallic surfaces, Device for producing pearl finish on.....	B. D. Beiderhase and C. Witteck.....	134,581	Jan. 7, 1873	78	25	3	13
Metallic surfaces, Device for producing satin finish on.....	B. D. Beiderhase and C. Witteck.....	134,582	Jan. 7, 1873	79	25	3	13
Metallic tubing, Machine for making.....	J. Huggins.....	145,421	Dec. 9, 1873	344	115	4	625
Metallic washer.....	M. G. Hubbard.....	135,809	Feb. 11, 1873	394	127	3	170
Metallic furnace.....	G. Perry and J. Webb.....	138,523	May 6, 1873	51	17	3	501
Metallurgic furnace, Apparatus for condensing and purifying smoke of.....	W. J. Johnson.....	136,066	Feb. 18, 1873	623	{ 204 205 }	3	202
Metallurgic furnace, Draft-apparatus for.....	G. Wingate.....	144,585	Nov. 11, 1873	357	120	4	518
Metallurgic-furnace lining.....	S. Lansdowne.....	137,554	Apr. 8, 1873	257	79	3	389
Metallurgic gas-furnace.....	J. M. Hartman.....	141,002	July 22, 1873	611	206	4	86
Metallurgic gas-furnace.....	W. C. Wren.....	140,606	July 8, 1873	243	82	4	39
Meter:							
See Fluid-meter.							
Gas-meter.							
Liquid-meter.							
Rotary meter.							
Water-meter.							
Way-meter.							
Metronome.....	J. A. Heckenbach.....	136,435	Mar. 4, 1873	71	25	3	251
Micrometer-gage.....	A. Bonnaz.....	141,915	Aug. 19, 1873	473	155	4	190
Middlings-bolt.....	A. G. H. and W. Mowbray.....	144,783	Nov. 18, 1873	529	180	4	544
Middlings-purifier.....	J. Bandon and J. Wiggins, jr.....	143,490	Oct. 7, 1873	78	26	4	387
Middlings-purifier.....	F. Bleckman.....	143,118	Sept. 23, 1873	701	241	4	332
Middlings-purifier.....	W. A. Clarke.....	144,017	Oct. 28, 1873	600	{ 198 199 }	4	457
Middlings-purifier.....	J. H. Dedrick.....	142,086	Aug. 26, 1873	640	{ 210 211 }	4	214
Middlings-purifier.....	C. S. Fuller.....	144,329	Nov. 4, 1873	129	43, 44	4	489
Middlings-purifier.....	C. S. Fuller and H. J. Burdick.....	144,056	Oct. 28, 1873	632	208	4	460
Middlings-purifier.....	A. R. Guilder.....	145,170	Dec. 2, 1873	122	40, 41	4	595
Middlings-purifier.....	C. M. Hardenbergh, A. L. Miner, and W. J. Fender.....	139,386	May 27, 1873	844	270	3	597
Middlings-purifier.....	A. Herr.....	141,557	Aug. 5, 1873	127	40	4	145
Middlings-purifier.....	J. Hollingsworth.....	143,346	Sept. 30, 1873	903	307	4	364
Middlings-purifier.....	A. Hunter and C. E. Whitmore.....	137,207	Mar. 25, 1873	780	{ 257 258 }	3	337
Middlings-purifier.....	A. Hunter and C. E. Whitmore.....	142,022	Aug. 19, 1873	561	186	4	198
Middlings-purifier.....	A. Hunter and C. E. Whitmore.....	142,023	Aug. 19, 1873	562	186	4	198
Middlings-purifier.....	W. W. Huntley and A. P. Holcomb.....	135,810	Feb. 11, 1873	395	{ 127 128 }	3	170
Middlings-purifier.....	C. Janney.....	134,750	Jan. 14, 1873	242	78	3	40
Middlings-purifier.....	N. Lacroix.....	139,397	May 27, 1873	859	{ 274 275 276 }	3	598
Middlings-purifier.....	E. N. Lacroix.....	139,585	June 3, 1873	121	40	3	619
Middlings-purifier.....	E. N. Lacroix.....	144,988	Nov. 25, 1873	710	240	4	570
Middlings-purifier.....	C. E. McNeal.....	135,571	Feb. 4, 1873	164	53	3	140
Middlings-purifier.....	G. Parker.....	144,697	Nov. 18, 1873	459	155	4	538
Middlings-purifier.....	L. S. Reynolds.....	142,729	Sept. 9, 1873	362	122	4	283
Middlings-purifier.....	I. Schofield.....	145,906	Dec. 23, 1873	787	{ 257 258 }	4	685
Middlings-purifier.....	E. P. Welch.....	135,952	Feb. 18, 1873	524	171	3	194
Middlings-purifier.....	E. P. Welch.....	135,953	Feb. 18, 1873	525	172	3	194
Middlings-purifier.....	J. W. Wilson.....	139,843	June 10, 1873	375	116	3	655
Middlings-purifiers, Feeding device for.....	R. Craik.....	143,887	Oct. 21, 1873	465	156	4	436
Middlings-purifiers, Screen for.....	W. W. Huntley.....	143,014	Sept. 23, 1873	617	210	4	325
Middlings, Purifying.....	W. W. Huntley and A. P. Holcomb.....	135,811	Feb. 11, 1873	396	.....	3	170
Middlings receiver, cooler, and duster.....	A. Hunter and C. E. Whitmore.....	137,449	Apr. 1, 1873	151	49	3	369
Middlings-separator.....	R. L. Downton.....	143,442	Oct. 7, 1873	39	14	4	384
Middlings-separator.....	A. R. Guilder.....	138,019	Apr. 22, 1873	686	217	3	446

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Middlings-separator	H. P. Jones	138,408	Apr. 29, 1873	1,056	332	3	484
Milk and cream cooler	H. C. Baldwin	141,688	Aug. 12, 1873	260	84	4	164
Milk and cream cooler	J. Prince and N. D. Martin	136,542	Mar. 4, 1873	174	55	3	259
Milk-boiler	O. Zwicker	144,819	Nov. 18, 1873	559	190	4	547
Milk-boiler alarm	S. Mangold	139,072	May 20, 1873	554	174	3	566
Milk-can	J. F. Cass	145,334	Dec. 9, 1873	270	91	4	619
Milk-can, Metallic bottom for	T. M. Bell	134,723	Jan. 14, 1873	222	71	3	38
Milk, Condensed	G. and J. G. Borden	144,311	Nov. 4, 1873	114	.....	4	487
Milk-cooler	W. O. Campbell	136,584	Mar. 11, 1873	224	75	3	272
Milk-cooler	S. F. Cowles	136,215	Feb. 25, 1873	765	247	3	225
Milk-cooler	A. J. Crane and D. J. Hadley	144,835	Nov. 25, 1873	586	200	4	559
Milk-cooler	C. A. Douglass	144,448	Nov. 11, 1873	240	81	4	509
Milk-cooler	C. Graves, G. C. Powers, and C. O. Graves	145,732	Dec. 23, 1873	637	208	4	673
Milk-cooler	J. F. Hawkins	140,919	July 15, 1873	516	173	4	69
Milk-cooler	W. Hodgdon	138,088	Apr. 22, 1873	751	238	3	452
Milk-cooler	R. P. Main	146,084	Dec. 30, 1873	961	310	4	710
Milk-cooler	E. Martin	144,343	Nov. 4, 1873	142	47	4	490
Milk-cooler	W. D. McDonald	137,557	Apr. 8, 1873	260	80	3	389
Milk-cooler	F. S. Oakes	135,284	Jan. 28, 1873	740	238	3	107
Milk-cooler	J. Pearl	143,840	Oct. 21, 1873	425	142	4	433
Milk-cooler	D. Smith	144,572	Nov. 11, 1873	347	117	4	518
Milk-cooler	S. Spencer	135,169	Jan. 21, 1873	613	200	3	84
Milk cooling and transporting apparatus	E. D. Gird	136,150	Feb. 25, 1873	715	231	3	221
Milk, Preserving and condensing	G. and J. G. Borden	144,310	Nov. 4, 1873	113	.....	4	487
Milk, Process of preserving	L. F. Kirchhofer	141,878	Aug. 19, 1873	443	.....	4	188
Milk-safe	J. P. Dale	139,120	May 20, 1873	596	187	3	569
Mill:							
<i>See</i> Boring-mill.							
Cider-mill.							
Clay-mill.							
Coffee-mill.							
Crushing-mill.							
Fanning-mill.							
Flour-mill.							
Fulling-mill.							
Grinding-mill.							
Hominy-mill.							
Paint-mill.							
Pug-mill.							
Quartz-mill.							
Rolling-mill.							
Saw-mill.							
Smut-mill.							
Starch-mill.							
Wind-mill.							
Mill-pick	J. Cummings	140,118	June 24, 1873	642	202	3	692
Mill-pick	E. S. Forgy	138,080	Apr. 22, 1873	744	236	3	451
Mill-pick	T. R. Way	137,116	Mar. 25, 1873	696	231	3	331
Mill-pick	M. N. Young	142,321	Aug. 26, 1873	834	277	4	230
Mill-pick, Combination	J. W. Nance and D. Lillard	139,806	June 10, 1873	345	107	3	652
Mill-spindle	J. A. Hafner	146,063	Dec. 30, 1873	946	305	4	708
Milling-machine	B. Lawrence	138,260	Apr. 29, 1873	927	292 } 293 }	3	474
Milling-machine	G. T. Pillings	141,012	July 22, 1873	620	209	4	87
Millstone-balance	G. W. Wilson	135,740	Feb. 11, 1873	326	104	3	165
Millstone bush and spindle	R. S. Cathcart	137,418	Apr. 1, 1873	123	40	3	367
Millstone cooling-device	J. J. Roth	143,258	Sept. 30, 1873	823	282	4	358
Millstone cooling-device	E. D. Shanton and S. Shaver	138,050	Apr. 22, 1873	720	228	3	449
Millstone-dress	J. P. Harris	138,021	Apr. 22, 1873	688	217	3	447
Millstone dressing-machine	W. Farrow	142,009	Aug. 19, 1873	548	181	4	197
Millstone dressing-machine	J. B. Harris	137,364	Apr. 1, 1873	78	25	3	363
Millstone dressing-machine	F. A. Hoyt	136,517	Mar. 4, 1873	146	47	3	257
Millstone dressing-machine	J. W. Parish	141,288	July 29, 1873	886	291	4	116
Millstone dressing-machine	L. Randolph	141,949	Aug. 19, 1873	499	164	4	193
Millstone dressing-machine	S. Shive and D. Savage	141,392	July 29, 1873	990	321	4	124
Millstone dressing-machine, Diamond	F. S. Davenport	142,153	Aug. 26, 1873	698	230	4	218
Millstone dressing-machine, Diamond	D. Larer	144,851	Nov. 25, 1873	601	204	4	560
Millstone-driver	J. Planck	136,863	Mar. 18, 1873	465	154	3	301
Millstone-pick	T. R. Way	141,613	Aug. 5, 1873	178	57	4	149
Millstone-pick stock	F. Trump	137,979	Apr. 15, 1873	634	200	3	433
Millstone-spindle, Oiling	J. J. Chubb	138,074	Apr. 22, 1873	740	234	3	451
Millstone tram and level, Combined	J. Hutchins	135,812	Feb. 11, 1873	397	128	3	170
Millstones, Device for adjusting	A. W. Winall	135,393	Jan. 28, 1873	837	270	3	115
Millstones, Device for adjusting	A. W. Winall	137,748	Apr. 8, 1873	433	133	3	403
Millstones, Device for leveling	W. Ring	139,479	June 3, 1873	32	10	3	611
Millstones, Hanging	A. W. Winall	139,642	June 3, 1873	173	57	3	623
Millstones, Staff-gage for dressing	L. B. Woolever	135,956	Feb. 18, 1873	526	172	3	195
Minerals, Bit for boring	D. Shoemaker	142,949	Sept. 16, 1873	556	188	4	310
Miner's bar	R. B. Platt	138,098	Apr. 22, 1873	758	241	3	452
Miner's pick	R. K. Walton	144,808	Nov. 18, 1873	551	187	4	546
Mirror, Hand	J. F. Dohan	145,729	Dec. 23, 1873	634	207	4	673
Mirror-holder	W. Simpson	140,851	July 15, 1873	453	154	4	64
Mirror, Window	A. and A. Olander	137,383	Apr. 1, 1873	91	30	3	364
Mirror, Window	H. Voss and H. P. Brandt	141,476	Aug. 5, 1873	60	18	4	140
Mirrors, &c., Adjustable-hanger for	J. Wright	145,825	Dec. 23, 1873	713	234	4	679
Mirrors, Method of adjusting signaling	M. M. Kenney	138,162	Apr. 22, 1873	810	258	3	456
Miter-box	C. Caton	139,867	June 17, 1873	404	126	3	664
Miter-box	J. A. McKinstry and W. Walden	135,832	Feb. 11, 1873	413	134	3	171
Miter-box	G. M. Stevens	140,853	July 15, 1873	454	154	4	64
Miter-box	J. P. Tierney	142,878	Sept. 16, 1873	495	169	4	304
Miter-box for cutting printer's rules	T. H. Mead	144,406	Nov. 11, 1873	205	69	4	507
Miter-machine	D. Bull	140,763	July 15, 1873	376	128	4	58
Miter-machine	T. Pooley	145,751	Dec. 23, 1873	651	214	4	674
Mitering-machine	F. D. Green	140,267	June 24, 1873	765	242	3	702

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Mitering-machine.....	C. Loetscher.....	145,354	Dec. 9, 1873	286	95	4	621
Mitering-machine.....	J. H. Van Ness.....	143,265	Sept. 30, 1873	828	284	4	358
Mitten.....	F. L. Oakley.....	138,273	Apr. 29, 1873	939	296	3	475
Mitten, Knit.....	O. F. Tripp.....	142,301	Aug. 26, 1873	819	271	4	228
Mixing-machine.....	J. W. Stockwell.....	140,171	June 24, 1873	687	216	3	695
Moccasin.....	T. Hersey.....	135,548	Feb. 4, 1873	144	46	3	139
Moccasin.....	A. Margesson.....	142,252	Aug. 26, 1873	780	257	4	225
Mold:							
<i>See</i> Baking-mold.							
Bottle-mold.							
Building-block mold.							
Bullet-mold.							
Button-mold.							
Candle-mold.							
Casting-mold.							
Cigar-mold.							
Cigar-drying mold.							
Clay and cement pipe mold.							
Doughnut-mold.							
Glass-mold.							
Glassware-mold.							
Ingot-mold.							
Metallic mold.							
Pipe-mold.							
Sealing-mold.							
Stereotype-mold.							
Suppository-mold.							
Molds, Device for blackwashing.....	J. B. Aston.....	142,661	Sept. 9, 1873	306	101	4	279
Molder's draw-spike.....	R. A. Thompson.....	137,637	Apr. 8, 1873	327	101	3	395
Molder's flask.....	C. Truesdale.....	138,960	May 13, 1873	440	138	3	544
Molder's pot or ladle.....	J. McCleary.....	136,927	Mar. 18, 1873	520	171	3	305
Molding apparatus.....	W. C. Amish.....	145,828	Dec. 23, 1873	715	235	4	679
Molding, Cutter-head for.....	E. H. Hinners.....	140,626	July 8, 1873	259	88	4	41
Molding-machine.....	W. J. Boda.....	142,890	Sept. 16, 1873	504	172 173	4	305
Molding-machine.....	G. W. Gheen.....	138,015	Apr. 22, 1873	682	216	3	446
Molding-machine.....	N. Jenkins.....	145,804	Dec. 23, 1873	695	228	4	678
Molding-machine cutter-head.....	J. Alloways.....	142,548	Sept. 9, 1873	212	69	4	271
Molding pipe.....	A. W. A. Logen.....	141,150	July 22, 1873	743	245	4	97
Molding plastic articles, Composition for.....	C. Legg.....	136,658	Mar. 11, 1873	283	.....	3	277
Molding sand, Apparatus for crushing, grinding, and mixing.	J. O. Hanctin.....	136,721	Mar. 11, 1873	336	111	3	281
Moldings, Apparatus for filling, polishing, and varnishing.	M. Hamburger, I. J. Siskind, and A. Klein.	134,599	Jan. 7, 1873	95	31	3	14
Moldings, Rolled iron.....	M. M. Manley and S. Sellers.....	134,553	Jan. 7, 1873	48	15	3	11
Mole-trap.....	R. I. Huggins.....	146,003	Dec. 30, 1873	892	289	4	704
Monument.....	J. C. Taylor.....	145,254	Dec. 2, 1873	193	67	4	600
Mop and mop-ringer, Combined.....	J. L. Boyden.....	135,400	Feb. 4, 1873	5	2	3	128
Mop-head.....	J. W. Barbour.....	135,753	Feb. 11, 1873	340	109	3	166
Mop-head.....	C. B. Clark.....	145,397	Dec. 9, 1873	322	109	4	624
Mop-head.....	J. Davis.....	142,328	Sept. 2, 1873	6	2	4	242
Mop-head.....	W. Duncan.....	134,739	Jan. 14, 1873	233	75	3	39
Mop-head.....	D. W. Marston and J. S. Skinner.....	145,958	Dec. 30, 1873	854	278	4	701
Mop-head.....	G. W. Wheat.....	135,679	Feb. 11, 1873	276	87	3	161
Mop-holder.....	C. L. Haines.....	136,912	Mar. 18, 1873	506	167	3	304
Mop-holder.....	E. M. Maramore.....	143,633	Oct. 14, 1873	217	73	4	407
Mop-wringer.....	A. W. Bunnell.....	144,828	Nov. 25, 1873	578	197	4	559
Mop-wringer.....	J. H. Newton.....	140,216	June 24, 1873	724	228	3	699
Mop wringer and scrubber combined.....	W. R. Winter.....	140,566	July 1, 1873	192	65	4	24
Mortar-mixer.....	A. A. Hoagland and W. Mickel..	143,575	Oct. 14, 1873	167	56	4	402
Mortar-mixer.....	C. Pierce.....	141,947	Aug. 19, 1873	497	164	4	192
Mortar-mixer.....	C. W. Wasson.....	136,571	Mar. 4, 1873	197	65	3	261
Mortar mixer and grinder.....	E. Spaulding.....	139,338	May 27, 1873	802	256	3	594
Mortising-machine.....	J. Driver.....	140,257	June 24, 1873	756	239	3	701
Mortising-machine.....	E. Hammond.....	138,649	May 6, 1873	159	51	3	510
Mortising-machine.....	L. Houston.....	135,337	Jan. 28, 1873	789	255	3	111
Mortising-machine.....	E. J. Houston.....	135,917	Feb. 18, 1873	497	161	3	192
Mortising-machine.....	G. Muschar.....	134,815	Jan. 14, 1873	298	96	3	44
Mortising-machine.....	G. F. Outten.....	137,950	Apr. 15, 1873	608	191	3	431
Mortising-machine.....	J. H. Stahl.....	135,604	Feb. 4, 1873	201	62	3	143
Mortising-tool.....	H. K. Forbis.....	146,058	Dec. 30, 1873	943	304	4	708
Motion, Apparatus for preventing back.....	A. H. and J. H. Race.....	143,252	Sept. 30, 1873	817	280	4	357
Motion, Apparatus for reproducing.....	C. T. Chester.....	139,294	May 27, 1873	771	245	3	591
Motion, Converting rotary motion of a shaft into reciprocating.	J. B. Siner.....	136,675	Mar. 11, 1873	300	99	3	278
Motion, Device for converting.....	W. M. Cox.....	145,931	Dec. 30, 1873	829	270	4	699
Motion, Device for converting.....	J. P. Taylor.....	145,599	Dec. 16, 1873	510	167	4	651
Motion, Device for converting.....	H. Wheeler.....	145,540	Dec. 16, 1873	463	151	4	647
Motion, Device for converting circular into reciprocating.	L. Dame.....	135,697	Feb. 11, 1873	293	93	3	163
Motion, Device for transferring.....	W. H. Benson.....	140,878	July 15, 1873	473	160	4	66
Motion for machinery, Electrical stop.....	E. Maertens.....	140,287	June 24, 1873	783	248	3	704
Motion, Mechanical movement for converting oscillating into rotary.	J. Peabody.....	135,288	Jan. 28, 1873	743	239	3	107
Motive-power.....	G. Meyer.....	137,856	Apr. 15, 1873	532	166	3	424
Motive-power, Device for transmitting.....	R. T. Smith.....	135,293	Jan. 28, 1873	747	241	3	108
Motive-power engines, Mode of recovering and regenerating steam in.	F. M. H. Motard.....	142,038	Aug. 19, 1873	579	191	4	199
Motive-power, Spring.....	T. B. Fogarty.....	134,533	Jan. 7, 1873	28	9	3	9
Motor:							
<i>See</i> Air-motor.							
Churn-motor.							
Electro-magnetic motor.							
Fluid-motor.							
Hydraulic motor.							
Sewing-machine motor.							

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Motor	M. Comstock	138,737	May 13, 1873	253	79	3	528
Motor	L. H. Dean	145,490	Dec. 16, 1873	410	135	4	642
Motor	L. E. Truesdell	136,286	Feb. 25, 1873	828	268	3	230
Motor-engine	T. D. Richardson	137,865	Apr. 15, 1873	539	168	3	425
Motor for driving machinery	A. N. Proctor	142,041	Aug. 19, 1873	583	192	4	199
Movement, Mechanical	J. Armstrong	142,365	Sept. 2, 1873	39	14	4	245
Movement, Mechanical	C. W. Carr	135,263	Jan. 28, 1873	724	231	3	106
Movement, Mechanical	J. H. Cranston	145,402	Dec. 9, 1873	326	110	4	624
Movement, Mechanical	J. Dangier	140,683	July 8, 1873	305	103	4	44
Movement, Mechanical	J. B. Doolittle	139,499	June 3, 1873	50	16	3	613
Movement, Mechanical	R. Eickemeyer	139,379	May 27, 1873	836	268	3	596
Movement, Mechanical	E. C. Hopping	137,924	Apr. 15, 1873	587	185	3	429
Movement, Mechanical	L. V. Lewis	141,800	Aug. 12, 1873	360	118	4	172
Movement, Mechanical	C. Meiners	138,424	Apr. 29, 1873	1,075	339	3	486
Movement, Mechanical	W. Oliver	142,578	Sept. 9, 1873	238	77	4	273
Movement, Mechanical	W. Park	134,766	Jan. 14, 1873	254	83	3	41
Movement, Mechanical	A. G. Waterhouse	137,115	Mar. 25, 1873	695	231	3	331
Movements, Apparatus for producing intermittent rotative	R. C. Reynolds	140,951	July 15, 1873	549	184	4	72
Mower, Lawn	W. Allen	144,725	Nov. 18, 1873	481	163	4	540
Mower, Lawn	T. Coldwell and G. L. Chadborn	136,969	Mar. 18, 1873	553	184	3	308
Mower, Lawn	S. D. King	135,563	Feb. 4, 1873	155	50	3	140
Mower, Lawn	S. D. King	137,691	Apr. 8, 1873	376	117	3	399
Mower, Lawn	W. Sellers	143,787	Oct. 21, 1873	379	126	4	429
Mower, Lawn	T. Soetbeer	139,741	June 10, 1873	286	89	3	648
Mowing-machine	C. Colahan	140,890	July 15, 1873	485	164	4	67
Mowing-machine	E. C. Hopping	145,872	Dec. 23, 1873	755	246	4	682
Mowing-machine	W. A. Kirby	142,111	Aug. 26, 1873	663	218	4	216
Mowing-machine	H. Michaux	136,380	Mar. 4, 1873	26	9	3	247
Mowing-machine	H. Michaux	143,025	Sept. 23, 1873	626	213	4	325
Mowing-machine	W. S. Stone	142,053	Aug. 19, 1873	597	196	4	200
Mowing-machine	W. V. Walker	141,611	Aug. 5, 1873	176	56	4	149
Mowing-machine	G. W. N. Yost	137,817	Apr. 15, 1873	498	156	3	422
Mowing-machine knife-grinder	M. W. Knox	134,809	Jan. 14, 1873	294	95	3	41
Mucilage	A. Kloczewski and D. Mindeleff	137,213	Mar. 25, 1873	787	.....	3	337
Mucilage-cup	J. E. Crosby	145,155	Dec. 2, 1873	108	35	4	594
Muff	R. M. Seldis	135,163	Jan. 21, 1873	609	198	3	84
Muff-lining	C. F. Butterworth	139,942	June 17, 1873	470	147	3	670
Muff-stand	L. Bergtold	145,330	Dec. 9, 1873	268	90	4	619
Music blackboard	O. B. Brown and H. G. Carey	145,622	Dec. 16, 1873	529	173	4	652
Music-box cylinder, Manufacture of	A. Frankfeld	144,084	Oct. 28, 1873	657	216	4	462
Music-desk, Piano	M. Doherty	134,860	Jan. 14, 1873	337	108	3	47
Music-leaf turner	G. Dominy	135,322	Jan. 28, 1873	771	{ 249 250 }	{ 3 3 }	110
Music-leaf turner	J. H. Gerry	139,141	May 20, 1873	618	193	3	571
Music-leaf turner	J. B. Geyser	138,631	May 6, 1873	144	47	3	509
Music-leaf turner	N. P. Hall	141,644	Aug. 12, 1873	220	70	4	161
Music-leaf turner	L. F. Morawetz	134,557	Jan. 7, 1873	51	16	3	11
Music-leaf turner	A. Rosenfield	137,797	Apr. 15, 1873	482	151	3	420
Music-leaf turner	G. W. White	140,664	July 8, 1873	288	97	4	43
Music-notation	J. P. Powell	141,013	July 22, 1873	622	209	4	87
Music-notation	E. P. Stewart	138,104	Apr. 22, 1873	763	242	3	453
Music-rack	C. L. Ely	134,530	Jan. 7, 1873	26	8	3	9
Music-stand	O. Schulze	140,547	July 1, 1873	174	59	4	22
Musical blackboard	J. M. Thomson and J. Cordley	138,714	May 6, 1873	221	69	3	515
Musical instrument	M. Cannon	139,293	May 27, 1873	771	244	3	591
Musical instrument	W. Leigh	137,219	Mar. 25, 1873	791	261	3	338
Musical instrument	A. Schoenhut	137,243	Mar. 25, 1873	812	267	3	339
Musical instrument	J. and H. W. Whitney	137,643	Apr. 8, 1873	332	102	3	395
Musical instruments Electro-pneumatic action for	W. F. and H. Schmoele, jr	145,532	Dec. 16, 1873	457	149	4	646
Musical instruments, Pedal for	H. Haas	143,509	Oct. 7, 1873	93	33	4	388
Musical instruments, Sounding-board bridge for	G. Woods	138,725	May 6, 1873	232	72	3	516
Musical instruments, Sounding-plate for	A. Schoenhut	144,148	Oct. 28, 1873	706	234	4	466
Musical wind-instrument	I. Fiske	138,389	Apr. 29, 1873	1,039	327	3	483
Musical wind-instrument	I. Fiske	143,134	Sept. 23, 1873	712	244	4	333
Musical wind-instrument	G. E. Parker	140,069	June 17, 1873	578	183	3	679
Musquito-canopy	W. Bourquignon	143,119	Sept. 23, 1873	702	241	4	332
Mustard-pot	T. M. Schleier	135,595	Feb. 4, 1873	191	59	3	142
N.							
Nail:	See Capped nail.						
	Cut-nail						
	Horseshoe-nail.						
	Picture-nail.						
	Shoe-nail.						
Nail	W. N. Hall	135,114	Jan. 21, 1873	567	184	3	81
Nail	B. T. Nichols	141,810	Aug. 12, 1873	367	120	4	173
Nail-assorting apparatus	J. Coyne	139,548	June 3, 1873	89	30	3	616
Nail-assorting machine	B. Berelander	138,783	May 13, 1873	292	90	3	531
Nail-clincher	J. Kunz	134,680	Jan. 7, 1873	172	56	3	20
Nail-cutting machine	C. W. Glidden	135,797	Feb. 11, 1873	380	123	3	169
Nail-cutting machine	S. P. Hollis and H. P. Chess	135,915	Feb. 18, 1873	495	161	3	192
Nail-cutting machine	M. Thibault	145,696	Dec. 16, 1873	592	194	4	657
Nail-delivering machine	S. S. Putnam	145,755	Dec. 23, 1873	657	215	4	675
Nail-distributor	A. Morrison	144,407	Nov. 11, 1873	205	69	4	507
Nail-distributing machine	C. M. Chase	134,852	Jan. 14, 1873	331	106	3	47
Nail-driving machine	A. Smith	145,818	Dec. 23, 1873	707	232	4	679
Nail-extractor	G. J. Capewell	143,496	Oct. 7, 1873	83	28	4	387
Nail-extractor	D. R. Moreland and C. Blocher	137,945	Apr. 15, 1873	604	190	3	431
Nail-extractor	G. C. Taft	145,975	Dec. 30, 1873	870	282	4	702
Nail machine, Cut	W. Haddock	144,845	Nov. 25, 1873	596	203	4	560
Nail machine, Cut	E. A. Kimball	145,504	Dec. 16, 1873	422	{ 138 139 }	{ 4 4 }	643

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Nail machine, Cut	J. Russell	144, 220	Nov. 4, 1873	54	16	4	482
Nail-plate feeder	J. McNeeley	143, 022	Sept. 23, 1873	624	212	4	325
Nail-plate feeder	S. K. Paden	137, 710	Apr. 8, 1873	393	122	3	400
Nail-plate feeder	J. Poulson	145, 681	Dec. 16, 1873	580	190	4	656
Nail-plate, Mechanism for feeding	R. C. Grant	136, 235	Feb. 25, 1873	779	252	3	226
Nail selecting and delivering machine	A. Knowlton	135, 345	Jan. 28, 1873	796	257	3	111
Nail selecting and delivering machine	A. Knowlton	136, 074	Feb. 18, 1873	630	207	3	203
Nail-separating apparatus	A. Morrison	143, 246	Sept. 30, 1873	811	279	4	357
Nail-separating device	H. B. Chess	145, 720	Dec. 23, 1873	625	205	4	672
Nail-separating machine	B. Bevelander	135, 312	Jan. 28, 1873	761	{ 245 246 }	{ 3 3 }	{ 109 109 }
Napkin-holder and clasp, Child's table	D. Essex	136, 146	Feb. 25, 1873	713	230	3	221
Neck-tie	R. R. Parker	138, 097	Apr. 22, 1873	758	241	3	452
Neck-tie fastening	J. A. Hard	140, 412	July 1, 1873	60	21	4	13
Neck-tie supporter	A. Komp	140, 049	June 17, 1873	559	177	3	677
Neck-tie supporter	E. Peltz	136, 538	Mar. 4, 1873	169	54	3	259
Needle and shuttle threader and knife	J. Slack	143, 726	Oct. 14, 1873	308	101	4	413
Needle-case	W. J. Marchant and H. B. Hart	142, 639	Sept. 9, 1873	286	94	4	277
Needle-case	G. Wempe	134, 829	Jan. 14, 1873	313	100	3	45
Needle-cushion	W. H. Bixler	140, 609	July 8, 1873	246	83	4	40
Needle-making machine	F. W. Mallett	138, 419	Apr. 29, 1873	1, 065	{ 335 337 }	{ 3 3 }	{ 485 485 }
Needle, Manufacture of latch	T. T. Mayne	140, 150	June 24, 1873	669	210	3	694
Needle-setter, threader, and cutter	A. Johnston	135, 479	Feb. 4, 1873	80	25	3	134
Needle-sharpening device	R. S. Barnum and H. C. Goodrich	142, 552	Sept. 9, 1873	215	70	4	271
Needle-threader	F. R. Gaspray	144, 974	Nov. 25, 1873	698	236	4	569
Needle-threading hook	H. Wells	145, 978	Dec. 30, 1873	873	283	4	702
Needles, Machine for forming the hooks of machine	N. Paine	142, 863	Sept. 16, 1873	483	165	4	303
Net-frame, Mosquito	N. Peterson and R. Roescher	136, 456	Mar. 4, 1873	87	30	3	252
Net, Portable fly and mosquito	T. M. Prentiss	144, 792	Nov. 18, 1873	536	183	4	545
Nickel-plating	I. Adams, jr.	136, 634	Mar. 11, 1873	265		3	276
Nippers, &c., Cutting	P. Broadbooks	144, 734	Nov. 18, 1873	488	{ 165 166 }	{ 4 4 }	{ 541 541 }
Nitro-glycerine, Can for transporting	A. Hamar	137, 439	Apr. 1, 1873	144	47	3	369
Nitro-glycerine, Manufacture of	A. Hamar	137, 440	Apr. 1, 1873	144	47	3	369
Non-freezing battery	E. H. Ashcroft	145, 143	Dec. 2, 1873	98	32	4	593
Nozzle for drawing liquors, Cut-off	F. C. Edwards	142, 383	Sept. 2, 1873	58	19	4	246
Nozzle for hose-pipe, Stop	J. N. Allen	144, 942	Nov. 25, 1873	672	228	4	567
Nozzle for locomotive, Exhaust	G. W. Richardson	136, 619	Mar. 11, 1873	251	84	3	275
Nozzle, Hose	E. A. Day	136, 309	Feb. 25, 1873	846	273	3	231
Nozzle, Hose-pipe	B. A. Berryman and A. B. Wakefield	137, 881	Apr. 15, 1873	550	172	3	426
Nozzle, Hose-pipe	F. E. Hall	141, 787	Aug. 12, 1873	348	115	4	171
Nozzle, Oil-can	G. H. Perkins	145, 898	Dec. 23, 1873	780	255	4	684
Nozzle, Pump	C. O. Wilson	136, 478	Mar. 4, 1873	108	36	3	254
Nozzle, Steam	W. Ebbitt	140, 902	July 15, 1873	510	168	4	68
Nubia and vail, Combined	J. W. Tuttle	145, 977	Dec. 30, 1873	872	283	4	702
Number printer, Consecutive	R. M. Evans	144, 196	Nov. 4, 1873	22	6	4	480
Numbering heads	C. W. Dickinson	140, 899	July 15, 1873	495	167	4	68
Numbering-machine	J. D. Smith	145, 598	Dec. 16, 1873	508	167	4	650
Nursery-gate	J. W. Boughton	139, 232	May 27, 1873	716	225	3	586
Nursery-gate	E. A. Tuttle	141, 677	Aug. 12, 1873	250	79	4	163
Nut	F. L. Delfer	134, 649	Jan. 7, 1873	141	45	3	18
Nut	W. Van Anden	137, 395	Apr. 1, 1873	104	34	3	365
Nut, Adjustable	J. Russell	136, 184	Feb. 25, 1873	741	239	3	223
Nut and bolt fastening	J. T. Antill and W. J. Sloan	141, 980	Aug. 19, 1873	522	173	4	195
Nut and bolt fastening	P. F. King	141, 877	Aug. 19, 1873	443	144	4	188
Nut and bolt fastening	E. B. Wingate	134, 963	Jan. 14, 1873	427	136	3	54
Nut and coffee roaster	D. T. Gale	139, 054	May 20, 1873	532	168	3	564
Nut and washer machine	W. R. Wilbur	139, 696	June 10, 1873	244	77	3	644
Nut-fastening washer	H. P. Hood	134, 990	Jan. 21, 1873	463	148	3	72
Nut for securing piston-head to piston-rod	J. Wheelock	140, 328	June 24, 1873	822	261	3	707
Nut-lock	J. M. Allison	137, 646	Apr. 8, 1873	334	103	3	395
Nut-lock	M. L. Ballard	137, 401	Apr. 1, 1873	108	35	3	366
Nut-lock	W. H. Bowman	144, 886	Nov. 25, 1873	628	213	4	563
Nut-lock	E. A. Cooper	144, 511	Nov. 11, 1873	291	98	4	514
Nut-lock	E. Czarniecki	140, 119	June 24, 1873	643	202	3	692
Nut-lock	B. W. Davis	136, 906	Mar. 18, 1873	502	166	3	304
Nut-lock	C. Dittman	144, 964	Nov. 25, 1873	690	233	4	568
Nut-lock	H. W. Dopp	142, 215	Aug. 26, 1873	748	247	4	222
Nut-lock	J. R. Eichenberger and C. G. Binkly	137, 426	Apr. 1, 1873	131	42	3	367
Nut-lock	M. Hays	137, 919	Apr. 15, 1873	584	184	3	429
Nut-lock	H. P. Hood and W. Coombs	135, 553	Feb. 4, 1873	148	47	3	139
Nut-lock	C. A. Howard	144, 905	Nov. 25, 1873	641	218	4	564
Nut-lock	A. C. Hull and J. S. Brown	139, 467	June 3, 1873	21	7	3	610
Nut-lock	E. Kaylor	145, 427	Dec. 9, 1873	349	117	4	625
Nut-lock	G. W. Keen	137, 453	Apr. 1, 1873	155	50	3	369
Nut-lock	L. Leeds	146, 081	Dec. 30, 1873	958	309	4	709
Nut-lock	K. H. Loomis	142, 709	Sept. 9, 1873	344	116	4	282
Nut-lock	H. C. Lowe	142, 858	Sept. 16, 1873	480	164	4	303
Nut-lock	L. J. Miller	138, 268	Apr. 29, 1873	934	295	3	475
Nut-lock	I. E. Nagle	137, 382	Apr. 1, 1873	91	30	3	364
Nut-lock	W. H. Nichols	135, 242	Jan. 28, 1873	707	226	3	104
Nut-lock	S. Peatfield	144, 131	Oct. 28, 1873	693	230	4	465
Nut-lock	A. Porter	139, 260	May 27, 1873	739	234	3	588
Nut-lock	J. A. Reed	140, 644	July 8, 1873	273	92	4	42
Nut-lock	D. Sawyer	143, 097	Sept. 23, 1873	685	236	4	330
Nut-lock	A. C. Smith	146, 102	Dec. 30, 1873	983	317	4	711
Nut-lock	J. B. Sweetland	146, 106	Dec. 30, 1873	985	318	4	711
Nut-lock	C. H. Taylor	142, 877	Sept. 16, 1873	494	169	4	304
Nut-lock	D. O. Thompson and B. A. Rice	135, 864	Feb. 11, 1873	436	142	3	173
Nut-lock	F. P. Thompson	141, 403	July 29, 1873	1, 001	325	4	125
Nut-lock	E. Turner	137, 513	Apr. 1, 1873	216	66	3	374
Nut-lock	W. B. Wait	138, 214	Apr. 22, 1873	858	272	3	460

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Nut-lock.....	C. R. Watrous.....	146, 113	Dec. 30, 1873	992	320	4	712
Nut-lock.....	A. Williams.....	134, 781	Jan. 14, 1873	267	87	3	42
Nut-lock washer.....	M. F. McIntyre.....	136, 848	Mar. 18, 1873	454	150	3	300
Nut-locking device.....	J. Wetmore.....	135, 052	Jan. 21, 1873	523	169	3	77
Nut machine.....	J. Braun.....	138, 066	Apr. 22, 1873	733	232	3	450
Nut, Rubber jam.....	W. Todd.....	134, 823	Jan. 14, 1873	309	98	3	45
Nut-tapping machine.....	S. W. Putnam, jr.....	140, 727	July 8, 1873	340	115	4	47
Nut-tapping machine.....	S. W. Putnam, jr.....	142, 511	Sept. 2, 1873	170	55	4	255
Nut-threading machine.....	O. P. and L. W. Briggs.....	137, 757	Apr. 15, 1873	445	{ 138 139 }	{ 3 3 }	417
Nuts and bolts, Machine for dressing.....	J. Kohler.....	135, 131	Jan. 21, 1873	584	190	3	82
Nuts, Device for dressing sides of.....	L. Doeg.....	144, 265	Nov. 4, 1873	81	26	4	484
O.							
Oakum, Machine for twisting.....	L. and C. Howard.....	135, 338	Jan. 28, 1873	791	256	3	111
Oakum with tar, &c., Coating.....	J. F. Stairs.....	146, 105	Dec. 30, 1873	985	318	4	711
Offal and manufacturing fertilizers, Treating.....	J. J. Storer.....	135, 383	Jan. 28, 1873	830	268	3	114
Offal and manufacturing fertilizers, Treating.....	J. J. Storer.....	136, 943	Mar. 18, 1873	533	176	3	306
Offal, Apparatus for treating.....	J. N. B. Bond.....	139, 759	June 10, 1873	302	93	3	649
Offal, Apparatus for treating.....	W. L. Bradley.....	134, 844	Jan. 14, 1873	325	104	3	46
Offal, Apparatus for treating.....	A. Edwards.....	135, 324	Jan. 28, 1873	775	251	3	110
Offal, Apparatus for treating.....	J. A. Slater.....	135, 733	Feb. 11, 1873	321	103	3	165
Offal-dryer.....	M. Anderson.....	139, 528	June 3, 1873	72	24	3	615
Office table and bed, Combined.....	D. Walker.....	135, 021	Jan. 21, 1873	495	159	3	75
Oil and paint can.....	J. T. Williams.....	136, 575	Mar. 4, 1873	200	67	3	261
Oil, Apparatus for testing hydro-carbon.....	J. B. Blair.....	139, 654	June 10, 1873	197	64	3	641
Oil, Apparatus for treating linseed.....	D. D. Templeton.....	136, 881	Mar. 18, 1873	486	159	3	302
Oil-cabinet.....	T. Miller.....	144, 856	Nov. 25, 1873	607	206	4	561
Oil-cakes, Mold for.....	R. MacDonald.....	144, 400	Nov. 11, 1873	200	68	4	506
Oil-can.....	J. E. Auld.....	141, 619	Aug. 12, 1873	200	63	4	159
Oil-can.....	G. H. Chinnock.....	142, 613	Sept. 9, 1873	265	87	4	275
Oil-can.....	J. R. Cole.....	141, 920	Aug. 19, 1873	476	156	4	191
Oil-can.....	W. G. Cowell.....	143, 810	Oct. 21, 1873	400	133	4	431
Oil-can.....	W. A. Foster.....	143, 567	Oct. 14, 1873	160	53	4	402
Oil-can.....	W. R. Hallock.....	145, 999	Dec. 30, 1873	889	288	4	704
Oil-can.....	M. W. House.....	141, 224	July 29, 1873	829	271	4	111
Oil-can.....	H. Keller.....	139, 318	May 27, 1873	790	251	3	592
Oil-can.....	A. P. Quinby.....	136, 544	Mar. 4, 1873	175	56	3	259
Oil-can.....	H. M. Smith.....	139, 927	June 17, 1873	458	143	3	669
Oil-can.....	O. H. Warren.....	143, 107	Sept. 23, 1873	693	238	4	331
Oil-can.....	F. C. Wilson.....	141, 615	Aug. 5, 1873	179	57	4	150
Oil can and torch, Combined.....	W. Kelley.....	136, 738	Mar. 11, 1873	349	116	3	282
Oil-can, Apparatus for filling.....	E. F. Wilder.....	135, 680	Feb. 11, 1873	277	87	3	161
Oil-can stopper.....	L. R. Boyd.....	134, 842	Jan. 14, 1873	323	103	3	46
Oil-cloth printing-machine.....	C. Rommel.....	137, 962	Apr. 15, 1873	618	195	3	432
Oil-cloth printing-machine.....	W. E. Worth.....	145, 379	Dec. 9, 1873	304	102	4	622
Oil, Composition paint.....	J. McCafferty.....	137, 854	Apr. 15, 1873	531	.....	3	424
Oil-cup.....	A. T. Ballantine.....	143, 216	Sept. 30, 1873	783	271	4	354
Oil dripping-can.....	L. R. Boyd.....	135, 072	Jan. 21, 1873	537	174	3	78
Oiler.....	C. E. and Z. B. Grandy.....	137, 361	Apr. 1, 1873	76	25	3	363
Oiler for steam-engines.....	A. Worden.....	141, 304	July 29, 1873	902	296	4	117
Oiler, Pneumatic.....	C. E. Decker.....	141, 703	Aug. 12, 1873	270	88	4	165
Oil from can, Apparatus for drawing.....	J. G. Evenden.....	140, 022	June 17, 1873	534	169	3	675
Oil from petroleum, Lubricating.....	J. K. Truax.....	137, 157	Mar. 25, 1873	730	.....	3	333
Oil for paint, &c., Treating.....	D. D. Cattinach.....	146, 044	Dec. 30, 1873	928	.....	4	707
Oil-press.....	W. M. Force.....	136, 716	Mar. 11, 1873	331	109	3	281
Oil purifying and filtering apparatus.....	D. M. Lamb.....	144, 621	Nov. 18, 1873	396	132	4	533
Oils, &c., Cask for transporting.....	W. Jenkins.....	144, 103	Oct. 28, 1873	671	222	4	463
Oil-tank, Self-measuring.....	J. Schalk, jr.....	139, 084	May 20, 1873	564	177	3	566
Oil-tool extractor.....	S. Buckley and P. H. Lawrence.....	140, 345	July 1, 1873	10	3	4	9
Oil to render it drying, Treating cotton-seed.....	H. Goldman.....	141, 503	Aug. 5, 1873	84	.....	4	142
Oil, Wood-finishing compound or.....	F. Webster.....	138, 109	Apr. 22, 1873	767	.....	3	453
Ointment.....	M. A. Curtis.....	136, 308	Feb. 25, 1873	845	.....	3	231
Ointment.....	J. G. Hucks.....	139, 315	May 27, 1873	788	.....	3	592
Ointment, Rheumatic.....	J. Geemen.....	135, 983	Feb. 18, 1873	549	.....	3	196
Oleine from fatty matters, Extracting.....	C. F. A. Simonin.....	144, 000	Oct. 28, 1873	585	194	4	456
Ordnance and projectile therefor.....	B. O. Pole.....	143, 251	Sept. 30, 1873	816	280	4	357
Ordnance, Breech-loading.....	C. Gordon.....	138, 146	Apr. 22, 1873	795	254	3	455
Ore and manufacturing iron and steel, Apparatus for treating.....	E. Peckham.....	140, 158	June 24, 1873	675	212	3	695
Ore-concentrator.....	J. A. Peer.....	142, 646	Sept. 9, 1873	291	96	4	277
Ore-crushing stamp.....	J. M. McFarland.....	140, 425	July 1, 1873	69	25	4	14
Ore grinding and crushing mill, Feeder for.....	C. P. Stanford.....	139, 204	May 20, 1873	676	212	3	576
Ore grinding and crushing mill, Feeder for.....	C. P. Stanford.....	139, 523	June 3, 1873	67	23	3	614
Ore, Jigger for separating.....	W. H. Plumb.....	140, 535	July 1, 1873	164	56	4	22
Ore-pulverizer.....	S. Gardner.....	144, 330	Nov. 4, 1873	130	44	4	489
Ore-reducing furnace.....	J. H. Boyd.....	144, 184	Nov. 4, 1873	8	2	4	479
Ore-reducing furnace.....	J. H. Boyd.....	144, 186	Nov. 4, 1873	11	3	4	479
Ore-reducing furnace, Apparatus for feeding fuel to.....	J. H. Boyd.....	144, 185	Nov. 4, 1873	10	3	4	479
Ore-reducing furnace, Iron.....	J. Wilson.....	145, 471	Dec. 9, 1873	384	127	4	628
Ore roasting and smelting furnace.....	L. Stevens.....	141, 181	July 22, 1873	778	{ 254 255 }	{ 4 4 }	99
Ore roasting and treating furnace.....	Z. A. Willard.....	134, 782	Jan. 14, 1873	267	87, 88	3	42
Ore, Rotating blanket-slucies for washing.....	W. H. Patton.....	142, 271	Aug. 26, 1873	795	262	4	226
Ores and metals, Flux for treating.....	P. N. Mackay.....	145, 580	Dec. 16, 1873	494	.....	4	649
Ore-separator.....	H. Bradford.....	143, 492	Oct. 7, 1873	80	27	4	387
Ore-separator.....	H. Minot.....	145, 441	Dec. 9, 1873	359	120	4	626
Ore separator, concentrator, and amalgamator.....	H. H. Eames.....	139, 556	June 3, 1873	95	32	3	617
Ore, Separating precious metals from.....	S. W. Kirk.....	144, 772	Nov. 18, 1873	521	.....	4	544
Ores, Flux for smelting.....	S. D. Young.....	142, 186	Aug. 26, 1873	724	239	4	220
Ores, Furnace for chloridizing.....	I. M. Phelps.....	136, 261	Feb. 25, 1873	806	261	3	228
Ores, Reducing.....	J. H. Boyd.....	143, 662	Oct. 14, 1873	240	81	4	409
Ore-stamp.....	L. D. Webb.....	143, 480	Oct. 7, 1873	68	24	4	386
Ore-stamp feeder.....	J. D. Cusenbary and J. A. Mars.....	140, 250	June 24, 1873	750	237	3	701

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Ore-stamp feeder	J. Tullock	144, 714	Nov. 18, 1873	472	160	4	539
Ores, Stamp for crushing	G. D. Crocker	141, 493	Aug. 5, 1873	77	24	4	141
Ore-stamp mill	G. S. Olin	142, 172	Aug. 26, 1873	712	236	4	219
Ore-stamp, Sectional cam for	J. M. Thompson	140, 318	June 24, 1873	812	257	3	706
Ore, sulphurets, animal matter, paints, &c., Apparatus for treating.	H. H. and C. J. Eames	139, 664	June 10, 1873	205	67	3	642
Ore, Treating	M. Laffin	141, 147	July 22, 1873	741	.....	4	97
Ore-washer	R. Gidley	139, 570	June 3, 1873	109	36	3	618
Ore-washer	I. T. Halstead	142, 848	Sept. 16, 1873	473	161	4	302
Ore-washer	W. Hooper	139, 390	May 27, 1873	850	272	3	598
Ore-washer	J. A. Peer	142, 647	Sept. 9, 1873	292	96	4	277
Ore-washer	R. Solliday	138, 948	May 13, 1873	431	135	3	543
Ore-washer	R. Solliday	145, 455	Dec. 9, 1873	370	123	4	627
Ore-washer	S. Wheeler	145, 771	Dec. 23, 1873	671	219	4	676
Ore-washer	T. Wren	138, 307	Apr. 29, 1873	974	306	3	478
Ore-washer, Gudgeon or bearing for	S. Thomas	142, 530	Sept. 2, 1873	187	61	4	257
Organ action, Pneumatic	T. Winans	143, 602	Oct. 14, 1873	187	63, 64	4	404
Organ action, Reed	W. N. Manning	144, 781	Nov. 18, 1873	528	179	4	544
Organ case, Cabinet	A. J. Lorensen	134, 569	Jan. 7, 1873	64	19	3	12
Organ-coupler	R. E. Letton	141, 444	Aug. 5, 1873	31	10	4	137
Organ, Fall for parlor	W. O. Trowbridge	144, 167	Oct. 28, 1873	724	242	4	467
Organ free-reed	H. E. Hodgson	141, 792	Aug. 12, 1873	354	116	4	171
Organ, Operating-stops of	H. R. Moore	136, 664	Mar. 11, 1873	289	96	3	277
Organ, Reed	C. Austin	135, 875	Feb. 18, 1873	464	149	3	190
Organ, Reed	R. Burdett	135, 687	Feb. 11, 1873	286	90	3	162
Organ, Reed	R. Burdett	144, 382	Nov. 11, 1873	186	64	4	505
Organ, Reed	S. J. Crockett	139, 874	June 17, 1873	411	128	3	665
Organ, Reed	A. Dreher	137, 350	Apr. 1, 1873	67	21	3	362
Organ, Reed	L. K. Fuller	139, 666	June 10, 1873	207	68	3	642
Organ, Reed	L. K. Fuller	142, 690	Sept. 9, 1873	329	110	4	280
Organ, Reed	W. H. Gerrish	134, 536	Jan. 7, 1873	31	10	3	10
Organ, Reed	W. J. Kent	142, 399	Sept. 2, 1873	70	23	4	248
Organ, Reed	W. J. Kent	144, 549	Nov. 11, 1873	327	110	4	516
Organ, Reed	R. E. Letton	134, 754	Jan. 14, 1873	244	80	3	40
Organ, Reed	R. E. Letton	141, 510	Aug. 5, 1873	89	28	4	142
Organ-reed	M. C. Morgan	139, 912	June 17, 1873	446	139	3	668
Organ, Reed	E. Oakes	136, 614	Mar. 11, 1873	245	83	3	274
Organ, Reed	C. W. Palmer	139, 913	June 17, 1873	447	139	3	668
Organ, Reed	J. A. Smith	141, 468	Aug. 5, 1873	52	16	4	139
Organ, Reed	A. J. Lorensen	139, 483	June 3, 1873	37	12	3	612
Organ, Reed	G. Woods	134, 830	Jan. 14, 1873	314	100	3	45
Organ, Reed	G. Woods	145, 078	Dec. 2, 1873	36	11, 12	4	588
Organ-reed, Adjustable tongue for	M. Procopé	143, 093	Sept. 23, 1873	682	234	4	330
Organ reed-board	W. Munroe	144, 121	Oct. 28, 1873	685	227	4	464
Organ reed-board	A. W. Wilcox	140, 750	July 8, 1873	363	123	4	49
Organ reed, Reed	M. O. Nichols	144, 409	Nov. 11, 1873	207	70	4	507
Organ reed, Reed	J. R. Perry	135, 581	Feb. 4, 1873	179	56	3	141
Organ-stop action	J. A. Smith	141, 469	Aug. 5, 1873	54	17	4	139
Organ stop-action, Reed	I. T. Packard	140, 381	July 1, 1873	39	13	4	11
Organ stop-action, Reed	J. A. Smith	137, 102	Mar. 25, 1873	683	227	3	330
Organ swell, Reed	J. R. Lomas	141, 282	July 29, 1873	882	289	4	116
Organ-treadle	J. A. Smith	137, 101	Mar. 25, 1873	682	227	3	330
Oscillating chair	W. T. Doremus	135, 974	Feb. 18, 1873	540	179	3	196
Ovals, Apparatus for turning	M. T. Boulton	135, 515	Feb. 4, 1873	108	35	3	136
Oven and range combined, Baker's	J. Williams	140, 130	June 24, 1873	824	262	3	707
Oven, Bake	J. J. Piggott	138, 042	Apr. 22, 1873	711	225	3	449
Oven, Baker's	D. Donald	140, 686	July 8, 1873	307	104	4	44
Oven, Baker's	D. McKenzie	139, 802	June 10, 1873	340	105	3	652
Oven, Baker's	D. McKenzie	143, 522	Oct. 7, 1873	105	36, 37	4	389
Oven, Baker's	J. Rayney and W. Cairns	136, 546	Mar. 4, 1873	177	56, 57	3	259
Oven, Baker's	C. Robbins	137, 961	Apr. 15, 1873	617	{ 194 195 }	3	432
Oven for cooking-stove, Supplementary	C. O. Line	142, 483	Sept. 2, 1873	144	47	4	253
Oven-reel	A. Crumbie	142, 003	Aug. 19, 1873	544	180	4	196
Overflow-alarm	T. Mayes	144, 687	Nov. 18, 1873	450	152	4	538
Overall	E. Weil	143, 947	Oct. 21, 1873	512	172	4	440
Overshoe	G. Watkinson	144, 810	Nov. 18, 1873	552	187	4	546
Ox-shoe, Die for forming	J. Deeble	145, 633	Dec. 16, 1873	539	177	4	653
Ox-shoe, Machine for making	R. French	145, 561	Dec. 16, 1873	479	157	4	648
Ox-shoe, Machine for making	W. Hamilton	136, 915	Mar. 18, 1873	509	168	3	304
Oyster-can	C. H. Dexter	141, 124	July 22, 1873	717	239	4	95
Oyster-dredge	W. C. Hornfager and M. Fitzgibbons	141, 439	Aug. 5, 1873	26	8	4	137
Oyster-dredge	I. A. Ketcham	138, 164	Apr. 22, 1873	811	258	3	457
Oyster-dredge	J. Walmer	144, 169	Oct. 28, 1873	726	242	4	468
Oyster-dredge, Machine for raising	W. T. Howard	137, 550	Apr. 8, 1873	253	78	3	389
Oyster-opener	D. M. Cleary	144, 063	Oct. 28, 1873	639	210	4	460
Oyster-packing can	L. R. Comstock	135, 083	Jan. 21, 1873	543	177	3	79
Oyster-steaming vessel	C. S. Collins	136, 588	Mar. 11, 1873	227	76	3	273
Oyster-winder	W. H. Kanne	136, 737	Mar. 11, 1873	348	115	3	282
Ozone, Apparatus for making	C. H. Johnson	135, 226	Jan. 28, 1873	689	221	3	103
Ozone-generator	R. Heneage	136, 511	Mar. 4, 1873	139	45	3	257
Ozone-generator	R. Heneage	136, 512	Mar. 4, 1873	141	46	3	257
P.							
Package band and fastener	F. R. Hunt	137, 000	Mar. 18, 1873	581	193	3	310
Package-register	G. W. Moore	137, 231	Mar. 25, 1873	800	264	3	338
Packing-box	D. L. Bartlett	139, 106	May 20, 1873	582	182	3	568
Packing-box	L. A. Fullgraff	135, 108	Jan. 21, 1873	562	183	3	81
Packing-case	E. A. Pharo	135, 583	Feb. 4, 1873	180	56	3	141
Packing for hydrants, pumps, &c.	J. W. Murphy	142, 264	Aug. 26, 1873	789	260	4	226
Packing for journals, shafting, &c., Lubricating	S. Baxendale	145, 384	Dec. 9, 1873	308	.....	4	623
Packing for piston and stop-valve	P. Gifford	138, 633	May 6, 1873	146	47	3	509
Packing for piston-rod, &c., Metallic	J. C. Furness	138, 627	May 6, 1873	139	45	3	509

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Packing for piston-rods and valve-stems.....	W. Heston.....	141, 052	July 22, 1873	652	220	4	90
Packing for piston-rods, &c., Metallic.....	F. W. Pettée.....	135, 663	Feb. 11, 1873	262	82	3	160
Packing-machine.....	A. Ralph.....	142, 651	Sept. 9, 1873	295	97	4	278
Packing, Metallic piston.....	W. A. Boyden.....	143, 956	Oct. 28, 1873	544	180	4	453
Packing, Metallic piston.....	J. Massey.....	142, 640	Sept. 9, 1873	287	94	4	277
Packing or show-case.....	G. G. Bates.....	142, 073	Aug. 26, 1873	630	207	4	213
Packing, Piston.....	G. R. Babbitt and W. A. Harris.....	136, 405	Mar. 4, 1873	46	16	3	249
Packing, Piston.....	C. S. Barry.....	140, 608	July 8, 1873	245	83	4	39
Packing, Piston.....	J. C. Budd.....	143, 057	Sept. 23, 1873	656	225	4	328
Packing, Piston.....	J. W. Carey.....	140, 244	June 24, 1873	746	235	3	701
Packing, Piston.....	C. A. Hodge.....	142, 914	Sept. 16, 1873	525	{ 178 } 179	{ 4 } 4	307
Packing, Piston.....	T. J. Mayall.....	143, 705	Oct. 14, 1873	288	95	4	412
Packing, Piston.....	C. E. Perkins.....	138, 690	May 6, 1873	198	62	3	513
Packing, Piston-rod.....	J. F. Hermance.....	137, 444	Apr. 1, 1873	148	48	3	369
Packing, Piston-rod, &c.....	L. Katzenstein.....	135, 127	Jan. 21, 1873	580	189	3	82
Packing, Piston-rod.....	T. Lord.....	137, 783	Apr. 15, 1873	470	147	3	419
Packing, Piston-rod.....	W. W. Vanderbilt.....	140, 973	July 15, 1873	572	192	4	74
Packing, Well.....	J. H. Luther.....	134, 995	Jan. 21, 1873	468	150	3	73
Packings, &c., Rubber compound for the manufacture of.	C. L. Frink.....	142, 908	Sept. 16, 1873	520		4	307
Pad:							
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Paddle-float, Means of adjusting.....	J. B. Baptista.....	142, 835	Sept. 16, 1873	462	156	4	302
Paddle, Revolving.....	J. W. McDermott.....	135, 653	Feb. 11, 1873	252	80	3	159
Paddle-wheel.....	I. Atkins.....	142, 322	Sept. 2, 1873	1	1	4	242
Paddle-wheel.....	J. C. Chaffee.....	138, 856	May 13, 1873	359	111	3	537
Paddle-wheel.....	A. C. Fletcher.....	145, 857	Dec. 23, 1873	741	242	4	681
Paddle-wheel.....	T. J. Walker and H. H. Holbrook.....	134, 620	Jan. 7, 1873	111	37	3	16
Paddle-wheel, Feathering.....	G. K. Glenn.....	141, 135	July 22, 1873	729	242	4	96
Paddle-wheel, Feathering.....	A. Lefebvre.....	138, 900	May 13, 1873	393	123	3	540
Padlock.....	F. Egge.....	145, 853	Dec. 23, 1873	738	241	4	681
Padlock.....	H. Essex.....	140, 617	July 8, 1873	252	85	4	40
Padlock, &c.....	D. K. Miller.....	143, 990	Oct. 28, 1873	572	190	4	455
Padlock, Combination.....	W. N. Hall.....	145, 864	Dec. 23, 1873	747	244	4	682
Padlock, Combination.....	J. Kittle.....	135, 992	Feb. 18, 1873	558	184	3	197
Padlock, Combination.....	W. C. Langenau.....	144, 114	Oct. 28, 1873	679	225	4	464
Pail and commode, Combined slop.....	G. Howland.....	136, 999	Mar. 18, 1873	581	193	3	310
Pail, Dinner.....	E. C. Luks.....	138, 569	May 6, 1873	93	29	3	505
Pail, Dinner.....	P. Molan.....	137, 230	Mar. 25, 1873	799	264	3	338
Pail, Dinner.....	R. S. Squires.....	135, 946	Feb. 18, 1873	520	170	3	194
Pail, Folding.....	A. Du Chateau and J. D. Williams.....	144, 893	Nov. 25, 1873	632	215	4	563
Pail, Milking.....	A. J. Johnson.....	142, 917	Sept. 16, 1873	526	179	4	307
Pail, Milking.....	G. T. Lincoln.....	139, 679	June 10, 1873	220	71	3	643
Pail, Milking.....	H. Springer.....	137, 731	Apr. 8, 1873	415	127	3	402
Pails, &c., Non-conducting filling for walls of dinner.....	O. M. Spiller.....	144, 232	Nov. 4, 1873	57	17	4	482
Paint.....	J. Lucas.....	141, 802	Aug. 12, 1873	361	.....	4	172
Paint, &c., Box or can for.....	H. Tucker.....	139, 214	May 20, 1873	684	215	3	576
Paint-can.....	G. H. Chinnock.....	142, 612	Sept. 9, 1873	264	87	4	275
Paint-can.....	J. R. Cole.....	145, 400	Dec. 9, 1873	324	109	4	624
Paint-can.....	J. W. Masury.....	145, 670	Dec. 16, 1873	570	187	4	656
Paint-can.....	H. Miller.....	136, 085	Feb. 18, 1873	639	209	3	203
Paint-can.....	H. Miller.....	145, 440	Dec. 9, 1873	358	120	4	626
Paint-can.....	O. E. Walker.....	142, 971	Sept. 16, 1873	576	195	4	311
Paint-can and device for removing its contents.....	F. L. Miller.....	145, 439	Dec. 9, 1873	357	119	4	626
Paint, Can for packing and transporting.....	H. Tucker.....	134, 947	Jan. 14, 1873	414	132	3	53
Paint-can, Metal.....	G. H. Chinnock.....	139, 868	June 17, 1873	404	126	3	664
Paint-can, Metal.....	G. H. Chinnock.....	139, 869	June 17, 1873	405	127	3	664
Paint-can, Sealing.....	J. F. Walter, jr.....	140, 748	July 8, 1873	361	122	4	49
Paint-compound.....	C. Campbell.....	141, 544	Aug. 5, 1873	118	.....	4	145
Paint-compound.....	H. Nelson.....	139, 729	June 10, 1873	272	.....	3	647
Paint compound.....	J. Quarterman.....	143, 841	Oct. 21, 1873	426	.....	4	433
Paint-compound.....	C. A. Sitzler.....	145, 130	Dec. 2, 1873	89	.....	4	592
Paint-compound.....	F. A. Stall.....	141, 897	Aug. 19, 1873	458	.....	4	189
Paint-compound.....	J. S. Vosseller.....	135, 049	Jan. 21, 1873	521	.....	3	77
Paint, Compound for mixing.....	J. L. Newell.....	141, 231	July 29, 1873	836	.....	4	112
Paint, Fire-proof.....	C. P. Crossman.....	134, 522	Jan. 7, 1873	19	.....	3	9
Paint for oil-barrels, &c.....	W. L. Elkins.....	140, 817	July 15, 1873	426	.....	4	62
Paint for roofing, wood, metals, &c.....	J. C. and C. M. Bills.....	140, 991	July 22, 1873	601	.....	4	85
Paint-grinding mill.....	T. R. Kingdon and L. P. Dodge.....	136, 838	Mar. 18, 1873	446	148	3	299
Paint-mill.....	R. Byrne.....	144, 656	Nov. 18, 1873	426	143	4	536
Paint vessel and package.....	J. W. Masury.....	141, 061	July 22, 1873	659	222	4	90
Painters, Composition-filling for.....	R. Sharp.....	141, 518	Aug. 5, 1873	95	.....	4	143
Painters' jack, Carriage.....	A. G. Rykert.....	135, 593	Feb. 4, 1873	189	59	3	142
Painters' pot.....	T. E. Costello.....	137, 423	Apr. 1, 1873	128	42	3	367
Painters' stand, Carriage.....	J. Burtch.....	135, 771	Feb. 11, 1873	354	113	3	167
Painting barrels, casks, &c., Machine for.....	W. Burnet and G. B. Fisher.....	141, 542	Aug. 5, 1873	114	36	4	144
Painting, Oil.....	J. C. Walker.....	134, 827	Jan. 14, 1873	313		3	45
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Stew-pan.							
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Pans, Machine for forming	E. Kuessner	145,660	Dec. 16, 1873	561	184	4	665
Panel-moulding machine	C. H. Williamson and J. H. Allyn	136,800	Mar. 11, 1873	401	123	3	287
Panel-raising machine	F. D. Green	142,015	Aug. 19, 1873	555	183	4	197
Panel, Wooden	E. Maitre	145,221	Dec. 2, 1873	164	56	4	598
Pannier	J. S. Colby	141,854	Aug. 19, 1873	411	134	4	186
Pantaloons	F. T. Hoyt	140,197	June 24, 1873	710	223	3	697
Pantaloons	E. T. Tailor	143,792	Oct. 21, 1873	383	127	4	430
Pantaloons, Steaming and drying apparatus for shaping.	E. B. Viets	144,644	Nov. 18, 1873	419	140	4	535
Pantaloons-stretcher	L. Kaltenbacher	142,025	Aug. 19, 1873	565	187	4	198
Pantaloons-stretcher	J. D. Ryan	144,703	Nov. 18, 1873	463	137	4	539
Pantaloons-tree	M. Taine	140,172	June 24, 1873	688	216	3	696
Pantaloons-tree	E. B. Viets	139,283	May 27, 1873	763	242	3	590
Pantaloons, &c., Waistband-fastening for	J. A. Haarvig	144,334	Nov. 4, 1873	134	45	4	489
Paper	H. E. Wagner	138,302	Apr. 29, 1873	969		3	477
Paper and card-board to fix marks by metallic pencils, Treating.	H. M. Johnston	144,678	Nov. 18, 1873	441		4	537
Paper bag	L. D. Benner	143,321	Sept. 30, 1873	875	299	4	362
Paper bag	G. H. Chinnock	139,870	June 17, 1873	406	127	3	665
Paper bag	O. W. Stow	144,238	Nov. 4, 1873	62	19	4	483
Paper-bag machine	H. G. Armstrong	139,104	May 20, 1873	580	182	3	568
Paper-bag machine	L. D. Benner	138,844	May 13, 1873	347	107	3	536
Paper-bag machine	L. C. Crowell	143,674	Oct. 14, 1873	250	84	4	409
Paper-bag machine	T. Hotchkiss	135,275	Jan. 28, 1873	732	235	3	106
Paper-bag machine	W. Liddell	143,358	Sept. 30, 1873	913	310	4	365
Paper-bag machine	M. Murphy	135,145	Jan. 21, 1873	595	194	3	83
Paper-bag machine	J. S. Ostrander	143,925	Oct. 21, 1873	493	166	4	439
Paper-bag machine	J. P. Raymond	145,125	Dec. 2, 1873	80	25, 26	4	592
Paper bags, Machine for making	C. F. Annan	134,580	Jan. 7, 1873	75	24	3	13
Paper bag-making machine	G. Dunham	141,862	Aug. 19, 1873	419	136	4	187
Paper bags, Method of constructing	L. C. Crowell	137,533	Apr. 8, 1873	239	73	3	388
Paper box	M. W. Dillingham	135,469	Feb. 4, 1873	71	22	3	133
Paper box	E. M. Slayton	144,800	Nov. 18, 1873	544	185	4	545
Paper box	G. K. Snow	140,736	July 8, 1873	348	117	4	48
Paper-box fastening	D. Crannell	144,513	Nov. 11, 1873	293	99	4	514
Paper box, Machine for making	G. L. Jaeger	136,246	Feb. 25, 1873	789	255	3	227
Paper-clip	T. Orton	139,019	May 20, 1873	504	158	3	562
Paper-clip	M. A. Wheeler	139,285	May 27, 1873	765	242	3	590
Paper collar	C. A. Brown	138,849	May 13, 1873	352	109	3	536
Paper-collar machinery, Die for	G. Harrington and G. D. Rollins	139,146	May 20, 1873	622	194	3	571
Paper-cutter, Rotary	H. S. Miller	139,176	May 20, 1873	653	204	3	574
Paper-cutting machine	G. A. Walker	145,464	Dec. 9, 1873	377	125	4	628
Paper-cutting machine, Clamp for	E. T. Hazeltine and C. Park	137,920	Apr. 15, 1873	584	184	3	429
Paper, Designer's	A. Akeroyd	145,269	Dec. 9, 1873	213	73	4	615
Paper, Die for cutting out ornamental forms of	A. Delkescamp	137,063	Mar. 25, 1873	648	215	3	327
Paper-drier	E. A. Seeley	143,999	Oct. 28, 1873	585	194	4	456
Paper-feeding machine	J. T. Ashley	138,983	May 20, 1873	471	148	3	559
Paper-feeding machine	J. T. and F. Ashley	143,740	Oct. 21, 1873	337	113	4	426
Paper-feeding machine	M. Piedra	136,668	Mar. 11, 1873	292	98	3	278
Paper-feeding machine	S. Scholfield and C. E. Baker	135,597	Feb. 4, 1873	193	60	3	142
Paper-feeding machine	S. Scholfield and C. E. Baker	135,598	Feb. 4, 1873	194	60	3	142
Paper-feeding machine	S. Scholfield and C. E. Baker	135,599	Feb. 4, 1873	197	61	3	143
Paper-feeding machine	C. M. Wielings	145,542	Dec. 16, 1873	465	152	4	647
Paper folding, cutting, and trimming machine	C. Chambers, jr.	141,487	Aug. 5, 1873	67	21	4	140
Paper-folding machine	C. Chambers, jr., and W. Mendham.	141,489	Aug. 5, 1873	71	22, 23	4	140
Paper-folding machine	C. Chambers, jr., and W. Mendham.	141,490	Aug. 5, 1873	73	23	4	141
Paper-folding machine	R. J. Stuart	144,160	Oct. 28, 1873	717	239	4	467
Paper-folding machine	G. W. D. Upton	141,405	July 29, 1873	1,004	326	4	125
Paper-folding machine	A. Washburn	141,742	Aug. 12, 1873	301	99	4	168
Paper-folding machines, Packing and carrying device for.	W. Farrington	141,501	Aug. 5, 1873	82	26	4	142
Paper-folding machines, Packing-box for	C. Chambers, jr.	141,486	Aug. 5, 1873	66	21	4	140
Paper-folding machine, Packing-device for	C. Clark	141,491	Aug. 5, 1873	75	23	4	141
Paper folding, pasting, and inseting machine	C. Chambers, jr.	141,488	Aug. 5, 1873	69	22	4	140
Paper for bank-notes, &c., Safety	J. Jameson	137,775	Apr. 15, 1873	463		3	419
Paper from grain, Process of manufacturing	C. V. and J. Stehlin and H. A. Habaan.	144,294	Nov. 4, 1873	102		4	486
Paper-holder shelf	G. V. Hawkins	144,763	Nov. 18, 1873	514	174	4	543
Paper-machine	C. Whealen	144,172	Oct. 28, 1873	728	243	4	468
Paper-machine, Apparatus for repairing knotter, strainer, or screen plates of.	J. Robertson	140,166	June 24, 1873	682	214	3	695
Paper-machine belt-guide	R. Hutton	140,418	July 1, 1873	64	23	4	13
Paper-machine, Dandy-roller for	J. Whitehead	143,801	Oct. 21, 1873	393	130	4	430
Paper-machine, Stuff-regulator for	D. Hamel	144,902	Nov. 25, 1873	639	217	4	564
Paper-machine, Suction-apparatus for	W. McLaughlin	138,173	Apr. 22, 1873	821	261	3	457
Paper-making machine	N. Keely	141,358	July 29, 1873	959	312	4	122

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Paper-product.....	J. L. Kendall.....	144, 548	Nov. 11, 1873	327	110	4	516.
Paper-pulp engine.....	S. Moore and R. H. Hurlbut.....	144, 557	Nov. 11, 1873	333	112	4	517
Paper-pulp, Manufacture of.....	C. D. Brown and E. B. Denison.....	145, 620	Dec. 16, 1873	528	.....	4	652
Paper-pulp, Process of disintegrating woody fiber for.....	T. B. Armitage.....	142, 550	Sept. 9, 1873	213	.....	4	271
Paper-pulp, Treating fibrous substances for.....	A. Ungerer.....	143, 546	Oct. 7, 1873	132	44	4	391
Paper-pulp washing-machine.....	S. and J. Deacon.....	145, 159	Dec. 2, 1873	112	37	4	594
Paper-pulp, Wood-grinder for.....	M. S. and M. E. Otis.....	144, 354	Nov. 4, 1873	152	50	4	491
Paper-shears.....	W. P. Deane.....	139, 373	May 27, 1873	829	266	3	596
Paper-sizing.....	P. Grady.....	134, 797	Jan. 14, 1873	282	.....	3	43
Paper-stock, Manufacture of.....	H. T. Sturdevant.....	143, 940	Oct. 21, 1873	506	171	4	440
Paper-stock, Process of treating fibrous substances for.....	T. Routledge.....	137, 484	Apr. 1, 1873	185	58	3	372
Paper-stock, Treating fibrous substances in the manufacture of.....	T. Routledge.....	141, 016	July 22, 1873	624	210	4	87
Paper-stock washing-machine.....	G. L. Lovett.....	137, 696	Apr. 8, 1873	381	118	3	399
Paper-weight and sponge-holder combined.....	D. R. Manning.....	145, 883	Dec. 23, 1873	767	250	4	683
Parer, Apple.....	G. Bergner.....	135, 622	Feb. 11, 1873	226	71	3	157
Parer, Apple.....	W. A. C. Oaks.....	141, 070	July 22, 1873	669	225	4	91
Parer, corer, and slicer, Apple.....	J. Stewart and W. Campbell.....	140, 315	June 24, 1873	807	256	3	706
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Parer, Fruit.....	A. Turnbull and R. L. Webb.....	139, 237	June 10, 1873	370	115	3	654
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Passenger-register.....	S. L. Cooper.....	141, 492	Aug. 5, 1873	76	24	4	114
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Patterns, Manufacture of plaster.....	J. Semple.....	143, 384	Sept. 30, 1873	936	317	4	367
Patterns to supporting-plates, Attaching.....	J. H. Harper.....	134, 663	Jan. 7, 1873	156	51	3	19
Pavement.....	S. J. Davenport and J. Ward.....	143, 965	Oct. 28, 1873	550	182	4	453
Pavement.....	W. H. De Valin.....	144, 748	Nov. 18, 1873	500	170	4	542
Pavement.....	W. Kilburn.....	140, 835	July 15, 1873	439	149	4	63
Pavement.....	M. E. Worrell.....	134, 622	Jan. 7, 1873	113	37	3	16
Pavement, Composition.....	N. B. Abbott.....	139, 848	June 17, 1873	387	121	3	663
Pavement, Composition.....	D. C. Heller.....	138, 023	Apr. 22, 1873	689	218	3	447
Pavement, Composition for.....	G. L. Eagan.....	139, 127	May 20, 1873	605	.....	3	570
Pavement, Composition for.....	S. J. Whiting.....	142, 601	Sept. 9, 1873	258	.....	4	274
Pavement, Concrete.....	G. W. Dean.....	142, 444	Sept. 2, 1873	110	35	4	251
Pavement, Laying cement.....	A. F. Shyrma.....	140, 956	July 15, 1873	553	185	4	72
Pavement, Laying concrete.....	J. W. and H. W. Krause, jr.....	138, 030	Apr. 22, 1873	700	221	3	448
Pavement, Laying concrete.....	J. W. Snyder.....	139, 272	May 27, 1873	752	238	3	589
Pavement, Stone.....	A. Meckert.....	136, 747	Mar. 11, 1873	358	118	3	283
Pavement, Stone.....	T. D. Owens.....	143, 587	Oct. 14, 1873	116	60	4	403
Pavement, Wood.....	M. H. Alexander.....	135, 460	Feb. 4, 1873	65	20	3	132
Pavement, Wood.....	J. Q. Felt.....	134, 985	Jan. 21, 1873	459	147	3	72
Pavement, Wood.....	E. W. Perrin.....	146, 019	Dec. 30, 1873	908	294	4	705
Pavement, Wood.....	H. M. Stow.....	137, 973	Apr. 15, 1873	629	198	3	432
Pavement, Wood.....	C. Wheeler, jr.....	136, 572	Mar. 4, 1873	198	66	3	261
Paving composition.....	A. Thiele.....	142, 594	Sept. 9, 1873	251		4	274
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Peaches, Boxes for assorting.....	E. W. Lockwood.....	136, 252	Feb. 25, 1873	796	258	3	227
Peanut-heater.....	D. Kellogg.....	144, 108	Oct. 28, 1873	675	223	4	464
Peat-machine.....	H. and H. Clayton, jr., and F. Howlett.....	143, 617	Oct. 14, 1873	203	69	4	406
Peg-cutter.....	C. H. Bacon.....	145, 714	Dec. 23, 1873	620	203	4	672
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Peg-cutting machine for boots and shoes.....	A. Whittemore.....	140, 803	July 15, 1873	411	130	4	61
Peg-float.....	P. A. Schoellhorn.....	136, 551	Mar. 4, 1873	181	58	3	260
Peg-rasp.....	J. W. Foard.....	135, 419	Feb. 4, 1873	24	7	3	129
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Pegging and trimming machine, Shoe.....	R. E. Draper.....	137, 897	Apr. 15, 1873	564	177	3	427
Pegging-machine.....	G. W. Manson.....	136, 743	Mar. 11, 1873	355	117	3	283
Pegging-machine.....	G. L. Roberts.....	145, 900	Dec. 23, 1873	781	{ 255 } 256	{ 4 } 3	684 161
Pegging-machine, Boot and shoe.....	E. Woodward.....	135, 681	Feb. 11, 1873	278	88	3	161
Pegging-machine for boots and shoes.....	T. T. Prosser.....	145, 754	Dec. 23, 1873	654	214	4	674
Pen and pencil case.....	F. Edgell.....	137, 900	Apr. 15, 1873	570	179	3	428
Pen and pencil case.....	J. H. Knapp.....	142, 243	Aug. 26, 1873	773	254	4	225
Pen and pencil case.....	C. H. Streightoff.....	143, 859	Oct. 21, 1873	443	147	4	434
Pen, Fountain.....	J. Goodyear.....	140, 771	July 15, 1873	382	131	4	59
Pen, Fountain.....	H. N. Hamilton.....	145, 102	Dec. 2, 1873	59	19	4	390
Pen-holder.....	A. T. Cross.....	140, 478	July 1, 1873	114	39	4	17
Pen-holder.....	J. S. Orndorff.....	141, 287	July 29, 1873	886	290	4	116
Pen, Marking.....	D. S. Holman.....	143, 347	Sept. 30, 1873	905	307	4	364
Pen, Ruling.....	W. O. Hickok.....	140, 272	June 24, 1873	771	243	3	703
Pen-wiper.....	H. S. Ball.....	145, 778	Dec. 23, 1873	677	221	4	676
Pen-wiper.....	J. H. Kidder.....	142, 480	Sept. 2, 1873	141	46	4	253
Pen, Writing.....	R. H. Chian.....	135, 080	Jan. 21, 1873	542	176	3	79
Pen, Writing.....	J. Holland.....	135, 118	Jan. 21, 1873	569	185	3	81
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Pencil-case.....	S. S. Rembert.....	140, 842	July 15, 1873	444	151	4	64
Pencil-finishing machine.....	T. H. Müller.....	140, 946	July 15, 1873	545	183	4	72
Pencil-holder.....	G. A. Smith.....	135, 603	Feb. 4, 1873	200	62	3	143
Pencil, Lead.....	J. Gray.....	136, 319	Feb. 25, 1873	856	275	3	232
Pencil, Lead.....	P. Hufeland.....	136, 122	Feb. 18, 1873	671	219	3	205
Pencil, Lead.....	T. H. Müller.....	137, 089	Mar. 18, 1873	674	224	3	329
Pencil-sharpener.....	E. M. Craudall.....	136, 590	Mar. 11, 1873	228	77	3	273
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Perambulator.....	A. W. Richards.....	136, 867	Mar. 18, 1873	468	155	3	301
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Permutation-lock	H. Gross	145, 171	Dec. 2, 1873	124	41	4	595
Permutation-lock	P. W. Hall	142, 695	Sept. 9, 1873	332	{ 111 112	{ 4	281
Permutation-lock	S. Miller	145, 223	Dec. 2, 1873	166	57	4	598
Permutation-lock	E. Stockwell	142, 529	Sept. 2, 1873	185	61	4	257
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Permutation-lock, Tumbler for	E. W. Brettell	145, 618	Dec. 16, 1873	526	173	4	652
Pessary	E. P. Banning, sr	141, 253	July 29, 1873	858	280	4	114
Pessary	C. E. Flack	145, 854	Dec. 23, 1873	738	241	4	681
Pessary	O. M. Muncaster	141, 069	July 22, 1873	668	224	4	91
Pessary-adjuster	O. M. Muncaster	136, 449	Mar. 4, 1873	82	28	3	252
Petroleum, Apparatus and process for treating	S. Van Syckel	143, 945	Oct. 21, 1873	510	172	4	440
Petroleum, Device for burning	F. A. Hull	135, 476	Feb. 4, 1873	78	24	3	133
Petroleum, Treating heavy	J. J. Looney	139, 009	May 20, 1873	496	.....	3	561
Phosphates, Manufacture of acid	H. Storch and F. M. Lyte	137, 635	Apr. 8, 1873	323		3	395
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Photograph-burnisher	W. G. Entrekim	145, 161	Dec. 2, 1873	114	37	4	594
Photograph-burnishing press	W. G. Entrekim and J. Bramble, jr.	139, 132	May 20, 1873	608	190	3	570
Photograph-chair, Child's	M. H. Prescott, jr.	139, 329	May 27, 1873	796	254	3	593
Photograph-washing machine	L. V. Moulton	141, 658	Aug. 12, 1873	233	73	4	162
Photographs, Guide for cutting out	J. Schofield	138, 202	Apr. 22, 1873	850	269	3	460
Photographs, Roller-press for polishing	N. S. Bowditch	140, 456	July 1, 1873	94	32	4	16
Photographic apparatus	W. A. Leggo	138, 663	May 6, 1873	173	55, 56	3	511
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Photographic back-ground	A. B. Costello	145, 557	Dec. 16, 1873	477	156	4	648
Photographic cameo-embossing press	E. B. Barker	143, 608	Oct. 14, 1873	195	66	4	405
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Photographic monocular glasses	A. J. Dallemagne and L. Triboulet	146, 052	Dec. 30, 1873	937	302	4	708
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Photographic plate-holder	H. T. Anthony	138, 359	Apr. 29, 1873	1, 015	319	3	481
Photographic plate-holder	J. Buchtel	134, 512	Jan. 7, 1873	10	4	3	8
Photographic plate-holder	W. Lewis	138, 414	Apr. 29, 1873	1, 062	334	3	485
Photographic plate-holder	A. Semmendinger	145, 020	Nov. 25, 1873	738	249	4	572
Photographic printing-frame	W. H. Jacoby	143, 577	Oct. 14, 1873	168	56, 57	4	403
Photographic sky-light	C. D. Masher	137, 790	Apr. 15, 1873	475	149	3	420
Photography	E. L. Bergstresser	140, 001	June 17, 1873	514	163	3	673
Photography	W. H. Hill	141, 351	July 29, 1873	952	.....	4	121
Physical culture, Apparatus for	G. B. Windship	134, 578	Jan. 7, 1873	72	23	3	12
Piano	G. C. Mannner	141, 152	July 22, 1873	745	246	4	97
Piano-action	F. Koth	143, 986	Oct. 28, 1873	570	189	4	455
Piano-action	R. Kreter	145, 879	Dec. 22, 1873	762	249	4	683
Piano-action	L. Kühner	135, 820	Feb. 11, 1873	404	130	3	171
Piano-action	E. G. Newman and P. Anderson	140, 428	July 1, 1873	71	25	4	14
Piano-action	F. L. Trayser	143, 647	Oct. 14, 1873	228	77	4	408
Piano action, Upright	R. Kreter	137, 005	Mar. 18, 1873	585	195	3	310
Piano action, Upright	G. C. Mannner	137, 377	Apr. 1, 1873	87	28	3	364
Piano and organ attachment	L. J. Frémaux	145, 793	Dec. 23, 1873	687	225	4	677
Piano and organ keys	C. F. L. Goffrie and J. H. Schucht	137, 544	Apr. 8, 1873	249	76	3	389
Piano, Bell	C. G. Buttkeireit	142, 768	Sept. 16, 1873	407	137	4	297
Piano-forte	W. W. Bennett	142, 194	Aug. 26, 1873	731	241	4	221
Piano-forte action	A. K. Hebard	145, 417	Dec. 9, 1873	340	114	4	625
Piano-forte action	J. Shaudelle	134, 940	Jan. 14, 1873	409	131	3	53
Piano-forte bridge	W. C. Ellis	138, 012	Apr. 22, 1873	680	215	3	446
Piano-forte lid, Raising	H. N. Oliver	136, 090	Feb. 18, 1873	643	210	3	203
Piano-forte, organ, &c., Key for	E. P. Needham	140, 528	July 1, 1873	160	54	4	21
Piano-forte, Upright	G. H. Davis	143, 967	Oct. 28, 1873	552	183	4	453
Piano, Grand	G. Steck	143, 789	Oct. 21, 1873	381	126	4	429
Piano-hammers, Capping	I. Bullard	138, 001	Apr. 22, 1873	670	212	3	445
Piano-key, Machine for shaping	M. Pratt	141, 380	July 29, 1873	979	318	4	123
Piano-lid prop-stick	M. Doherty	139, 125	May 20, 1873	603	189	3	570
Piano pedal-attachment	G. C. A. Class	138, 857	May 13, 1873	359	111	3	537
Piano pedal-attachment	C. W. Held, jr. and A. M. Baugh	134, 886	Jan. 14, 1873	361	115	3	49
Piano pedal-stool	T. Springer	146, 103	Dec. 30, 1873	983	317	4	711
Piano sounding-board	T. Kater	135, 126	Jan. 21, 1873	579	188	3	82
Piano sounding-board	C. F. T. Steinway	135, 857	Feb. 11, 1873	432	140	3	173
Piano-string bridge	W. C. Ellis	144, 842	Nov. 25, 1873	593	202	4	560
Piano-truck	F. B. McGregor	145, 887	Dec. 23, 1873	769	251	4	684
Picture and card exhibitor	B. F. Bostian	142, 370	Sept. 2, 1873	43	15	4	245
Picture and other frames, Corner-piece for	T. Callanan	138, 611	May 6, 1873	123	41	3	508
Picture-frame	J. A. Burch	144, 599	Nov. 18, 1873	375	127	4	532
Picture-frame	H. S. Hale	138, 884	May 13, 1873	382	119	3	539
Picture-frame	F. Reifschneider	143, 464	Oct. 7, 1873	57	20	4	385
Picture-frame	J. L. Warren and J. W. Adderley	143, 861	Oct. 21, 1873	444	148	4	434
Picture-frame and exhibitor, Combined	B. Anyan	144, 648	Nov. 18, 1873	422	141	4	535
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Picture-frames, Wooden mat for	H. S. Hale	146, 067	Dec. 30, 1873	948	306	4	709
Picture-hanger	F. W. Ely	142, 156	Aug. 26, 1873	701	231	4	218
Picture-mounting machine	E. B. Christmas	137, 656	Apr. 8, 1873	343	106	3	396
Picture-nail	G. Vintschger	136, 566	Mar. 4, 1873	193	64	3	261
Pictures, Coloring	C. S. Mettais	134, 693	Jan. 7, 1873	183	.....	3	21
Pick, Manufacturing	D. Collins	138, 455	June 3, 1873	9	3	3	609
Pickets, Machine for pointing	H. Balcom	136, 807	Mar. 18, 1873	422	140	3	297
Pickets, Machine for pointing	A. B. Corby	135, 467	Feb. 4, 1873	69	22	3	133
Pickets, Machine for shaping	A. J. Sutherland	145, 766	Dec. 23, 1873	667	218	4	676
Pie-marker	T. S. Macomber	145, 808	Dec. 23, 1873	700	229	4	678
Pier, Iron front for stone	J. Abbott	138, 222	Apr. 29, 1873	889	281	3	471
Pigeon-hole	C. J. Clements and E. P. Fowler	137, 892	Apr. 15, 1873	560	176	3	427
Pigeon-trap	W. F. Parker	140, 532	July 1, 1873	162	55	4	21

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Pigments, Manufacture of white lead for.....	E. Milner.....	140, 721	July 8, 1873	337		4	47
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Pile-driver.....	C. H. Smith.....	141, 086	July 22, 1873	685	230	4	92
Pile-driver, Explosive.....	H. Vogler.....	137, 514	Apr. 1, 1873	216	66	3	374
Pile or caisson, Sinking pneumatic.....	F. E. Sickels.....	138, 945	May 13, 1873	427	134	3	543
Pile or fagot.....	J. Barker.....	142, 666	Sept. 9, 1873	311	103	4	279
Piles, Means for sinking broken.....	E. C. Boobar.....	145, 483	Dec. 16, 1873	404	133	4	642
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Pinchers and grappling-tool, Combined adjustable.....	S. B. Dexter.....	136, 907	Mar. 18, 1873	503	166	3	304
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Pinchers, Shoemaker's.....	W. H. Hanna.....	141, 047	July 22, 1873	648	218	4	89
Pine-leaves for use in the arts, Treating.....	C. E. Ramus.....	136, 671	Mar. 11, 1873	296		3	278
Pipe:							
<i>See</i> Asphalt-pipe.							
Blow-pipe.							
Cement-lined pipe.							
Cigar-shaped pipe.							
Dip-pipe.							
Drain-pipe.							
Earthen pipe.							
Earthenware-pipe.							
Fire-pipe.							
Gas-pipe.							
Hose-pipe.							
Molding-pipe.							
Smoking-pipe.							
Stove-pipe.							
Tobacco-pipe.							
Water-pipe.							
Pipe and oil-well tubing, Coupling for.....	D. Jones.....	142, 792	Sept. 16, 1873	427	144	4	299
Pipe-coupling.....	D. Ashworth.....	144, 943	Nov. 25, 1873	673	228	4	567
Pipe-coupling.....	J. Conner.....	136, 365	Mar. 4, 1873	11	4	3	246
Pipe-coupling.....	W. B. Dunning.....	143, 229	Sept. 30, 1873	797	275	4	355
Pipe-coupling.....	D. Myers.....	138, 515	May 6, 1873	44	15	3	501
Pipe-coupling.....	L. T. Scofield.....	141, 893	Aug. 19, 1873	455	148	4	189
Pipe-coupling.....	A. C. Sweetland.....	141, 830	Aug. 12, 1873	384	126	4	174
Pipe-coupling for railway-cars.....	M. Henszey, jr.....	139, 150	May 20, 1873	626	195	3	571
Pipe cutting and threading machine.....	W. D. Chase.....	143, 273	Sept. 30, 1873	833	287	4	359
Pipe-cutting tool.....	C. E. Haynes.....	135, 644	Feb. 11, 1873	246	77, 78	3	159
Pipe, &c., Device for cutting.....	A. J. Pennock and T. A. Chandler.....	136, 004	Feb. 18, 1873	568	187 188	3	198
Pipe-elbow, Machine for forming sheet-metal.....	H. B. Morrison.....	142, 929	Sept. 16, 1873	537	183	4	308
Pipe-elbow pattern.....	J. K. Home.....	141, 645	Aug. 12, 1873	221	70	4	161
Pipe-joint.....	J. Demarest.....	144, 663	Nov. 18, 1873	430	145	4	536
Pipe-joint.....	T. T. Prosser and G. C. Morgan.....	137, 717	Apr. 8, 1873	403	124	3	401
Pipe, Manufacture of.....	G. L. Eagan.....	142, 448	Sept. 2, 1873	113	.....	4	251
Pipe mold, Cement.....	F. I. Sage.....	141, 388	July 29, 1873	987	320	4	124
Pipe mold, Earthen.....	P. McIntyre.....	138, 035	Apr. 22, 1873	706	223	3	448
Pipe mold, Earthen.....	P. McIntyre.....	142, 168	Aug. 26, 1873	709	234	4	219
Pipe or car coupling.....	A. G. Story.....	138, 822	May 13, 1873	325	100	3	534
Pipe patterns, Mold for plaster.....	N. P. Bowler.....	142, 765	Sept. 16, 1873	405	137	4	297
Pipe-stem.....	J. Davis.....	139, 880	June 17, 1873	417	130	3	665
Pipe-stems, Machine for bending.....	J. Harvey.....	139, 148	May 20, 1873	624	195	3	571
Pipe-tip, Machine for milling.....	A. R. Weiss.....	138, 825	May 13, 1873	329	101	3	534
Pipe trap, Cement.....	A. A. Lovell.....	144, 277	Nov. 4, 1873	90	30	4	485
Pipe-wrench.....	W. H. Burton.....	135, 773	Feb. 11, 1873	355	114	3	167
Pipe-wrench.....	D. D. Ingram.....	143, 908	Oct. 21, 1873	481	162	4	437
Pipe-wrench.....	G. P. Moloney.....	139, 177	May 20, 1873	654	204	3	574
Pipe-wrench.....	E. S. Moulton.....	136, 089	Feb. 18, 1873	642	210	3	203
Pipe-wrench.....	J. Rigg.....	139, 530	June 3, 1873	65	22	3	614
Pipe-wrench.....	G. Warsop.....	140, 561	July 1, 1873	189	63	4	23
Pipe-wrench.....	H. B. Wheatcroft.....	145, 263	Dec. 2, 1873	202	69	4	601
Pipe-wrench.....	T. Williams.....	136, 350	Feb. 25, 1873	885	285	3	234
Pipe-wrench, Self-adjusting.....	T. Williams.....	136, 351	Feb. 25, 1873	886	285	3	234
Pipes, Swing-joint for.....	J. R. Worswick and E. Lewis.....	136, 577	Mar. 4, 1873	202	67	3	261
Piston.....	C. B. Allen.....	142, 659	Sept. 9, 1873	304	101	4	278
Piston and packing.....	A. K. Rider.....	143, 255	Sept. 30, 1873	820	281	4	357
Piston-head, Device for centering.....	O. S. Howard.....	141, 221	July 29, 1873	827	270	4	111
Piston in rotary steam-engine, Mode of lubricating.....	S. W. Wickes.....	141, 845	Aug. 12, 1873	397	129	4	175
Piston-rod, &c., Bushing for.....	G. W. Welsh.....	134, 955	Jan. 14, 1873	420	134	3	54
Piston-rods, &c., Stuffing-box for.....	P. W. Richards.....	135, 589	Feb. 4, 1873	186	58	3	142
Pitcher-cover.....	W. Bradley.....	134, 586	Jan. 7, 1873	82	26	3	13
Pitcher, Ice.....	E. A. Parker.....	138, 686	May 6, 1873	194	61	3	513
Pitcher, Molasses.....	T. B. Atterbury.....	140, 236	June 24, 1873	739	233	3	700
Pitcher, Molasses.....	W. C. King.....	138, 501	May 6, 1873	28	10	3	500
Pitcher, Molasses.....	E. B. Manning.....	140, 515	July 1, 1873	148	51	4	20
Pitcher, Molasses.....	D. C. Ripley.....	140, 793	July 15, 1873	403	137	4	60
Pitcher, Molasses.....	H. Wright.....	139, 698	June 10, 1873	245	77	3	644
Pitcher top, Molasses.....	G. P. Lang, jr.....	136, 076	Feb. 18, 1873	631	207	3	203
Pitcher top, Molasses.....	G. P. Lang, jr.....	137, 139	Mar. 25, 1873	716	237	3	332

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Pitman	H. Aufdembrinke	136,690	Mar. 11, 1873	309	102	3	279
Pitman	J. H. Carothers	142,611	Sept. 9, 1873	264	87	4	275
Pitman	J. H. Holly and J. F. Robertson	145,947	Dec. 16, 1873	847	275	4	700
Pitman	J. Swan	143,475	Oct. 7, 1873	64	22	4	386
Pitman	O. F. Thomas	141,902	Aug. 19, 1873	462	151	4	190
Pitman-connection	J. A. Shephard	140,312	June 24, 1873	805	255	3	706
Pitman, Mode of adjusting the length of	N. C. Stiles	135,380	Jan. 28, 1873	828	267	3	114
Pitman-rod	S. N. Wate, jr	143,648	Oct. 14, 1873	229	77	4	408
Pitman with shaft, Mode of connecting	R. Cleaveland	142,616	Sept. 9, 1873	269	88	4	275
Placards, &c., Device for suspending and exhibiting	E. Worrell and B. C. Moore	145,709	Dec. 16, 1873	606	198	4	658
Plane	J. C. Spencer	138,591	May 6, 1873	109	35	3	506
Plane, Bench	W. H. Brown and D. F. Williams	144,381	Nov. 11, 1873	185	63	4	505
Plane, Bench	C. H. Hardy	143,072	Sept. 23, 1873	666	228	4	328
Plane, Bench	G. W. Huber and A. E. Flickinger	145,106	Dec. 2, 1873	61	20	4	590
Plane, Carpenter's	J. A. Traut	136,469	Mar. 4, 1873	101	34	3	254
Plane, Combination	A. Johnson	146,004	Dec. 30, 1873	893	290	4	704
Plane, Crozing and chamfering	A. M. Strattan	141,828	Aug. 12, 1873	383	125	4	174
Plane for cutting cigar-lighters	W. H. Drips	142,216	Aug. 26, 1873	749	247	4	222
Plane-iron	E. Quast	145,311	Dec. 9, 1873	252	84	4	618
Plane, Match	J. Edwards	139,710	June 10, 1873	255	80	3	645
Plane, Match	C. G. Miller	142,037	Aug. 19, 1873	579	190	4	199
Plane, Metallic	J. A. Baines	141,535	Aug. 5, 1873	108	33, 34	4	144
Plane, Metallic	J. F. Baldwin	144,823	Nov. 25, 1873	575	196	4	558
Plane, Molding	A. S. Robertson	135,046	Jan. 21, 1873	517	167	3	77
Plane, Rabbet	F. Smith	143,101	Sept. 23, 1873	688	237	4	330
Plane, Scraping	J. Jones	135,341	Jan. 28, 1873	792	256	3	111
Plane, Splint	H. L. Weagant	143,737	Oct. 14, 1873	317	106	4	414
Plane, Surfacing	G. E. Franklin	138,625	May 6, 1873	138	45	3	509
Planer and lathe, Belt-shifting mechanism for	T. Reeve	142,814	Sept. 16, 1873	443	150	4	300
Planing clapboards, Machine for	J. Atkins	136,201	Feb. 25, 1873	754	243	3	224
Planing-machine	J. Atkins	140,235	June 24, 1873	739	233	3	700
Planing-machine	A. H. Frank and G. Spire	143,232	Sept. 30, 1873	799	275	4	356
Planing-machine	L. Gould	138,244	Apr. 29, 1873	909	287	3	473
Planing-machine	L. Gould	144,199	Nov. 4, 1873	24	7	4	480
Planing-machine	W. H. Gray	142,460	Sept. 2, 1873	123	40	4	252
Planing-machine	F. B. Miles	142,493	Sept. 2, 1873	157	51	4	254
Planing-machine	J. Miller	142,495	Sept. 2, 1873	158	51, 52	4	254
Planing-machine	S. W. Nelson	142,936	Sept. 16, 1873	545	185	4	309
Planing-machine	J. Rankin	145,012	Nov. 25, 1873	731	247	4	572
Planing-machine	T. Shaw	135,941	Feb. 18, 1873	515	168	3	194
Planing-machine	A. H. Shipman	138,703	May 6, 1873	208	66	3	514
Planing-machine	J. Utter	143,734	Oct. 14, 1873	315	105	4	414
Planing-machine	J. P. Woodbury	138,462	Apr. 29, 1873	1, 107	{ 349 } { 350 }	{ 3 }	488
Planing-machine	S. A. Woods	144,588	Nov. 11, 1873	359	121	4	519
Planing-machine cutter-head	E. G. Richards	142,731	Sept. 9, 1873	364	123	4	283
Planing-machine cutter-holder	W. Walkington	135,182	Jan. 21, 1873	624	204	3	86
Planing-machine feed-roll	S. Inman	135,224	Jan. 28, 1873	686	221	3	103
Planing-machine, Metal	R. Harper	141,049	July 22, 1873	650	219	4	89
Planing-machine, Metal	J. T. Kichner and W. Odenatt	143,080	Sept. 23, 1873	671	231	4	329
Planing-machine, Metal	G. C. Larned	141,006	July 22, 1873	615	208	4	87
Planing-machine, Shaving-conductor for	W. Weaver	145,375	Dec. 9, 1873	300	101	4	622
Planing-machine, &c., Suction-tube for	G. C. Westover	146,115	Dec. 30, 1873	994	321	4	712
Planing or molding machine, Cutter-head for	J. D. Kimball	142,794	Sept. 16, 1873	429	145	4	299
Planing the edges of sheet-metal, Machine for	G. B. Rundlett	145,593	Dec. 16, 1873	505	166	4	650
Plant-protector	T. R. Timby	135,173	Jan. 21, 1873	617	201	3	85
Planter and cultivator combined, Corn	G. De Vany, jr	140,254	June 24, 1873	753	238	3	701
Planter and fertilizer-distributor, Seed	E. P. Jones	140,046	June 17, 1873	556	176	3	677
Planter and fertilizer-distributor, Seed	R. Montfort	143,832	Oct. 21, 1873	419	139	4	432
Planter and guano-distributor, Cotton-seed	C. G. Wilson	143,211	Sept. 23, 1873	774	267	4	338
Planter and plow, Combined corn	J. T. McElhiney	137,309	Apr. 1, 1873	27	8, 9	3	359
Planter and seeder combined, Corn	R. Cowan	134,855	Jan. 14, 1873	333	{ 106 } { 107 }	{ 3 }	47
Planter, Corn	D. G. Boardman	136,961	Mar. 18, 1873	547	180	3	307
Planter, Corn	E. C. Brown	142,675	Sept. 9, 1873	318	106	4	279
Planter, Corn	A. C. and G. F. Burgner	135,521	Feb. 4, 1873	113	36	3	136
Planter, Corn	G. J. Carpenter	140,114	June 24, 1873	637	{ 200 } { 201 }	{ 3 }	692
Planter, Corn	J. Case	145,396	Dec. 9, 1873	320	108	4	623
Planter, Corn	W. J. C. Crandall	134,521	Jan. 7, 1873	17	6	3	9
Planter, Corn	J. S. Davis	145,728	Dec. 23, 1873	633	207	4	673
Planter, Corn	S. Dixon	135,098	Jan. 21, 1873	553	180	3	80
Planter, Corn	W. A. Eastin	134,984	Jan. 21, 1873	458	146	3	72
Planter, Corn	J. P. Fulghum and L. L. Lawrence	140,493	July 1, 1873	127	44	4	19
Planter, Corn	E. C. Gage	146,060	Dec. 30, 1873	944	304	4	708
Planter, Corn	T. A. Galt and G. S. Tracy	140,031	June 17, 1873	540	171	3	676
Planter, Corn	G. D. Haworth	134,747	Jan. 14, 1873	239	77	3	40
Planter, Corn	G. Hayes	139,672	June 10, 1873	214	69	3	642
Planter, Corn	E. E. Henegan	143,450	Oct. 7, 1873	46	16	4	384
Planter, Corn	G. O. Houck	138,158	Apr. 22, 1873	806	257	3	456
Planter, Corn	W. House	143,905	Oct. 21, 1873	478	161	4	437
Planter, Corn	C. Hutchins	143,826	Oct. 21, 1873	411	137	4	432
Planter, Corn	J. Ingels and W. R. Mount	135,813	Feb. 11, 1873	398	128	3	170
Planter, Corn	J. Klar	145,952	Dec. 30, 1873	850	276	4	701
Planter, Corn	M. Knickerbocker	142,922	Sept. 16, 1873	531	181	4	308
Planter, Corn	L. Lacey	138,259	Apr. 29, 1873	926	292	3	474
Planter, Corn	J. G. La Fonte	144,989	Nov. 25, 1873	712	241	4	570
Planter, Corn	N. C. Lamb	142,706	Sept. 9, 1873	342	115	4	281
Planter, Corn	A. C. Martin	137,700	Apr. 8, 1873	384	119	3	400
Planter, Corn	A. C. Martin and R. Ferguson	145,115	Dec. 2, 1873	69	22	4	591
Planter, Corn	W. Mull	141,723	Aug. 12, 1873	286	93	4	166
Planter, Corn	J. Nitkey	137,563	Apr. 8, 1873	264	82	3	390
Planter, Corn	E. Parmentier	140,432	July 1, 1873	74	26	4	14
Planter, Corn	D. Pierson, J. W. Macy, and J. D. Moore	136,337	Feb. 25, 1873	872	281	3	233

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Planter, Corn	A. Röhrmer	139,617	June 3, 1873	150	50	3	621
Planter, Corn	H. A. Sharp	139,269	May 27, 1873	749	237	3	589
Planter, Corn	J. Sheer	135,942	Feb. 18, 1873	516	168	3	194
Planter, Corn	L. Sipe	144,708	Nov. 18, 1873	467	158	4	539
Planter, Corn	A. D. Smith	134,942	Jan. 14, 1873	410	131	3	53
Planter, Corn	A. F. Smith	143,262	Sept. 30, 1873	826	283	4	358
Planter, Corn	A. N. Smith	143,036	Sept. 23, 1873	636	217	4	326
Planter, Corn	J. D. Smith	136,341	Feb. 25, 1873	877	282	3	234
Planter, Corn	A. Springsteen	144,711	Nov. 18, 1873	469	159	4	539
Planter, Corn	A. H. Stark	139,205	May 20, 1873	677	{ 212 213 }	3	576
Planter, Corn	G. W. Starrett	142,656	Sept. 9, 1873	300	99	4	278
Planter, Corn	J. Statz	144,233	Nov. 4, 1873	57	17, 18	4	483
Planter, Corn	D. F. Taft	139,340	May 27, 1873	804	256	3	594
Planter, Corn	S. and H. Vannuys	135,178	Jan. 21, 1873	620	202	3	85
Planter, Corn	Z. D. Waters	140,562	July 1, 1873	189	63, 64	4	23
Planter, Corn and cotton	J. W. Savage and F. M. Doty	139,195	May 20, 1873	669	209	3	575
Planter, Corn and cotton	Z. B. Sims	139,620	June 3, 1873	152	51	3	621
Planter, Cotton	R. E. Bowen	141,753	Aug. 12, 1873	312	102	4	168
Planter, Cotton	J. M. Brooks	135,766	Feb. 11, 1873	350	112	3	167
Planter, Cotton	W. J. Cox and W. T. Smith	141,328	July 29, 1873	924	302	4	119
Planter, Cotton	C. H. Nixon	144,784	Nov. 18, 1873	530	180	4	544
Planter, Cotton	G. Paterson	139,732	June 10, 1873	276	86	3	647
Planter, Cotton	W. Price	138,043	Apr. 22, 1873	712	225	3	449
Planter, Cotton	W. E. Rhodes	135,290	Jan. 28, 1873	744	240	3	107
Planter, Cotton	P. Seymour	144,037	Oct. 28, 1873	615	203	4	459
Planter, Cotton	O. L. Slater	142,355	Sept. 2, 1873	29	11	4	244
Planter, Cotton and corn	A. Penington, jr.	144,562	Nov. 11, 1873	337	114	4	517
Planter, Cotton-seed	Z. Carter	145,554	Dec. 16, 1873	475	155	4	648
Planter, Cotton-seed	D. P. Ferguson	144,607	Nov. 18, 1873	382	128	4	532
Planter, Cotton-seed	A. D. Griswold	138,497	May 6, 1873	24	9	3	499
Planter, Cotton-seed	J. L. Slocumb	141,085	July 22, 1873	684	229	4	92
Planter, Cotton-seed	L. B. Sutton	136,342	Feb. 25, 1873	877	283	3	234
Planter, Dropper for seed	H. H. Koeller	145,575	Dec. 16, 1873	490	161	4	649
Planter, Hand	R. Arey	136,688	Mar. 11, 1873	308	102	3	279
Planter, Hand	D. B. Seely	137,246	Mar. 25, 1873	816	268	3	340
Planter, Hand	S. S. Stults	135,294	Jan. 28, 1873	748	241	3	108
Planter, Hand	G. Windle	136,294	Feb. 25, 1873	835	270	3	230
Planter, Hand corn	J. W. Coleman	140,186	June 24, 1873	700	220	3	697
Planter, Hand corn	H. Gortner	138,392	Apr. 29, 1873	1,042	328	3	483
Planter, Hand corn	F. A. Hawkins	134,884	Jan. 14, 1873	359	114	3	49
Planter, Hand corn	M. P. Nemmers	144,919	Nov. 25, 1873	653	222	4	565
Planter, Hand corn	L. H. Richards	135,489	Feb. 4, 1873	88	23	3	134
Planter, Hand corn	E. Rogers	144,701	Nov. 18, 1873	462	156	4	539
Planter, Hand corn	M. C. Root	144,566	Nov. 11, 1873	340	115	4	517
Planter, Hand corn	J. O. Talmage	144,485	Nov. 11, 1873	272	92	4	512
Planter, Hand corn	J. D. Tracy and J. F. Platt	145,698	Dec. 16, 1873	595	195	4	658
Planter, Potato	C. Svendsen	140,965	July 15, 1873	564	189	4	73
Planter, Potato	F. W. Worstell	140,178	June 24, 1873	693	218	3	696
Planter, Seed	W. Call, jr.	139,943	June 17, 1873	471	148	3	670
Planter, Seed	R. Friday	136,231	Feb. 25, 1873	776	251	3	226
Planter, Seed	T. C. Garlington	135,704	Feb. 11, 1873	300	95	3	163
Planter, Seed	W. J. Saffrey	140,648	July 8, 1873	276	93	4	42
Planter, Seed	I. T. Suggs	138,105	Apr. 22, 1873	763	243	3	453
Planting-machine	J. M. Bright and E. Standt	141,538	Aug. 5, 1873	110	35	4	144
Plasterers' float	L. A. Goodsell	139,383	May 27, 1873	841	269	3	597
Plastering-machine	G. Stevens and J. H. Watson	145,459	Dec. 9, 1873	373	124	4	627
Platform:							
See Dumping-platform.							
Ferry-track platform.							
Scale-platform.							
Stove-platform.							
Window-platform.							
Plow	T. G. Andrews and A. Riviere	141,533	Aug. 5, 1873	106	32	4	143
Plow	A. Anschutz, A. Seidel, and M. Weber	144,308	Nov. 4, 1873	111	38	4	487
Plow	J. F. Benton	142,074	Aug. 26, 1873	630	207	4	213
Plow	W. Blackstone	143,660	Oct. 14, 1873	239	80	4	408
Plow	J. Blanchard	144,433	Nov. 11, 1873	230	77	4	509
Plow	E. Bourne	144,653	Nov. 18, 1873	424	142	4	535
Plow	T. E. C. Brinly	140,004	June 17, 1873	516	164	3	674
Plow	R. A. Brown	145,088	Dec. 2, 1873	48	15	4	589
Plow	N. Burch	136,361	Mar. 4, 1873	6	2	3	246
Plow	E. Cartwright	144,255	Nov. 4, 1873	74	24	4	484
Plow	C. M. Clark	145,627	Dec. 16, 1873	534	175	4	653
Plow	T. J. and G. M. Clark	137,060	Mar. 25, 1873	645	214	3	327
Plow	J. M. Cobb	138,131	Apr. 22, 1873	783	250	3	454
Plow	T. L. Cotton	137,894	Apr. 15, 1873	562	176	3	427
Plow	A. K. Dahl	144,960	Nov. 25, 1873	687	232	4	568
Plow	W. Donnelly	141,705	Aug. 12, 1873	272	88	4	165
Plow	W. A. Estes	143,279	Sept. 30, 1873	839	289	4	359
Plow	L. C. Frost	143,620	Oct. 14, 1873	208	70	4	406
Plow	J. L. Graham	145,862	Dec. 23, 1873	745	243	4	682
Plow	R. B. Ground	137,915	Apr. 15, 1873	581	183	3	429
Plow	J. S. Hall	144,760	Nov. 18, 1873	511	173	4	543
Plow	R. G. Hobson	134,670	Jan. 7, 1873	163	53	3	19
Plow	J. T. Hunter and D. L. H. Mitchell	136,245	Feb. 25, 1873	788	255	3	227
Plow	W. B. Jackson, J. M. and O. J. Childs	138,895	May 13, 1873	389	122	3	539
Plow	J. L. Laughlin	144,462	Nov. 11, 1873	252	85	4	510
Plow	P. Loeb	140,053	June 17, 1873	563	178	3	678
Plow	J. Love	135,829	Feb. 11, 1873	411	133	3	171
Plow	A. S. Mann	140,716	July 8, 1873	332	113	4	47
Plow	J. Marr	141,881	Aug. 19, 1873	446	145	4	188
Plow	C. Marsh, 2d	142,800	Sept. 16, 1873	434	146	4	299

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Plow	W. C. McCool	144,552	Nov. 11, 1873	330	111	4	516
Plow	J. J. Mitchell	146,088	Dec. 30, 1873	966	312	4	710
Plow	C. O. Nason	141,375	July 29, 1873	974	316	4	123
Plow	J. R. Nichols	136,257	Feb. 25, 1873	800	260	3	228
Plow	J. B. Norris	145,120	Dec. 2, 1873	74	23	4	591
Plow	J. Oliver	144,785	Nov. 18, 1873	531	181	4	544
Plow	J. C. Potter	140,302	June 24, 1873	795	253	3	705
Plow	W. Price	137,716	Apr. 8, 1873	402	123	3	401
Plow	J. W. Reed	135,289	Jan. 28, 1873	743	240	3	107
Plow	E. Reese	135,363	Jan. 28, 1873	812	262	3	113
Plow	L. B. Richardson	140,434	July 1, 1873	76	27	4	14
Plow	A. Riviere	144,477	Nov. 11, 1873	263	89	4	511
Plow	J. Roop	138,197	Apr. 22, 1873	846	268	3	459
Plow	H. Selick	135,850	Feb. 11, 1873	427	139	3	172
Plow	W. T. Ship, C. J. Peterson, and R. L. McLurd.	144,707	Nov. 18, 1873	466	158	4	539
Plow	S. W. Soule	143,263	Sept. 30, 1873	826	283	4	358
Plow	P. H. Starke	141,960	Aug. 19, 1873	506	167	4	193
Plow	S. L. Stockstill and H. D. Kutz	137,870	Apr. 15, 1873	542	169	3	425
Plow	G. B. Vaughan	139,036	May 20, 1873	516	163	3	563
Plow	W. M. Watson	134,716	Jan. 7, 1873	201	65	3	22
Plow	L. B. White	140,749	July 8, 1873	362	122	4	49
Plow	E. Wiard	142,136	Aug. 26, 1873	684	225	4	217
Plow	E. Wiard	144,584	Nov. 11, 1873	356	120	4	518
Plow	G. D. Wyman	136,120	Feb. 18, 1873	669	219	3	205
Plow and cultivator, Combined shovel	A. Smith	142,655	Sept. 9, 1873	300	98	4	278
Plow-boot	C. H. Ricker	138,196	Apr. 22, 1873	845	267	3	459
Plow-carriage	H. M. Bullitt	143,434	Oct. 7, 1873	33	12	4	383
Plow-clevis	A. Kaufman	137,078	Mar. 25, 1873	666	221	3	328
Plow-clevis	W. Lahman	140,715	July 8, 1873	331	112	4	47
Plow-coltter	E. Wiard	142,310	Aug. 26, 1873	825	274	4	229
Plow, Corn	J. Preston	138,818	May 13, 1873	323	100	3	534
Plow, Cotton-scraping	J. M. Cobb	144,509	Nov. 11, 1873	289	98	4	513
Plow-coupling	J. K. Pitts	135,360	Jan. 28, 1873	809	261	3	112
Plow-coupling	T. L. Thrasher	141,964	Aug. 19, 1873	510	168	4	193
Plow-draft attachment	N. Westcott	144,811	Nov. 18, 1873	553	188	4	546
Plow, Equalizing attachment for	D. H. King and W. M. Hulse	140,632	July 8, 1873	263	89	4	41
Plow, Gang	R. Coreth	142,084	Aug. 26, 1873	638	210	4	213
Plow, Gang	M. S. Curtiss	140,480	July 1, 1873	115	39	4	18
Plow, Gang	G. A. Groves	134,540	Jan. 7, 1873	35	11	3	10
Plow, Gang	A. M. Humphrey	136,062	Feb. 18, 1873	618	203	3	202
Plow, Gang	G. W. Manuel	137,697	Apr. 8, 1873	382	118	3	399
Plow, Gang	J. K. McLennan	135,654	Feb. 11, 1873	253	80	3	159
Plow, Gang	S. E. Parr	135,357	Jan. 28, 1873	806	260	3	112
Plow-handle	J. T. Raftery	138,434	Apr. 29, 1873	1,082	341	3	486
Plow-handle, Machinery for making	A. B. Farquhar	140,355	July 1, 1873	19	6	4	9
Plow-iron, Machine for making	J. M. McGinty and T. Nolan	136,444	Mar. 4, 1873	78	27	3	252
Plow-point, Reversible	R. M. Pattillo	142,864	Sept. 16, 1873	484	165	4	304
Plow, Potato	H. T. Basye	140,240	June 24, 1873	742	234	3	700
Plow, Railway snow	J. W. Arnold	138,836	May 13, 1873	339	105	3	535
Plow, Railway snow	O. D. Baird	138,116	Apr. 22, 1873	772	246	3	453
Plow, Railway snow	T. A. Davies	136,709	Mar. 11, 1873	325	107	3	280
Plow, Railway snow	W. Davis	136,975	Mar. 18, 1873	558	185	3	308
Plow, Railway snow	P. A. Smith	136,272	Feb. 25, 1873	817	264	3	229
Plow, Railway snow	W. H. Van Gieson	136,346	Feb. 25, 1873	882	284	3	234
Plow, Railway snow	W. Walker	135,499	Feb. 4, 1873	96	30	3	135
Plow, Railway snow	W. Wheelock	140,663	July 8, 1873	287	97	4	43
Plow, Railway snow	C. L. Wood	144,377	Nov. 4, 1873	171	57	4	492
Plow, Reversible	G. W. Howe	141,222	July 29, 1873	828	270	4	111
Plow, Rotary	C. T. Elliston	142,094	Aug. 26, 1873	649	213	4	214
Plow, Rotary	A. B. Hoffmeyer and J. Schmidt	145,177	Dec. 2, 1873	131	43	4	596
Plow-scraper	H. Leach	142,113	Aug. 26, 1873	664	218	4	216
Plow, Scraper-attachment for	J. P. Swofford	135,863	Feb. 11, 1873	436	142	3	173
Plow, Shovel	W. Johnson and M. Ranney	138,656	May 6, 1873	167	53	3	511
Plow, Shovel	J. J. Mitchell	141,583	Aug. 5, 1873	148	48	4	147
Plow, Snow	W. J. Roberts	143,095	Sept. 23, 1873	684	235	4	330
Plow, Snow	B. B. Sweet	143,731	Oct. 14, 1873	312	103	4	414
Plow, Sower-attachment to	J. Brown	145,148	Dec. 2, 1873	101	34	4	593
Plow, Steam	I. S. Allen, M. P. Browen, and C. W. Moulthrop.	144,820	Nov. 25, 1873	571	195	4	558
Plow, Steam	P. J. McDonald	139,966	June 17, 1873	485	153	3	671
Plow, Steam	A. E. McGaughey	134,913	Jan. 14, 1873	385	122	3	51
Plow, Subsoil	G. P. Birmingham	140,460	July 1, 1873	98	33	4	16
Plow, Subsoil	J. W. Howard	136,726	Mar. 11, 1873	340	112	3	281
Plow, Subsoil	J. R. Turner and J. Jacobs	144,487	Nov. 11, 1873	274	92	4	512
Plow, Subsoil	A. L. P. Vairin	140,660	July 8, 1873	285	96	4	43
Plow, Subsoil attachment for	E. Cutcliffe	143,335	Sept. 30, 1873	887	303	4	363
Plow, Subsoil gang	C. Myers	145,361	Dec. 9, 1873	291	98	4	621
Plow, Sulky	D. W. Hughes	140,505	July 1, 1873	139	48	4	19
Plow, Sulky	W. Ough	136,003	Feb. 18, 1873	567	187	3	198
Plow-truck	J. Flanagan	139,564	June 3, 1873	104	35	3	617
Plow, Wheel	J. Bingham and O. M. Pond	145,147	Dec. 2, 1873	101	33	4	593
Plow, Wheel	H. M. Freeman, J. Lowe, and J. F. Stevens.	134,878	Jan. 14, 1873	353	112	3	48
Plow, Wheel	I. B. Green	139,059	May 20, 1873	540	170	3	565
Plow, Wheel	W. S. Grimshaw	135,800	Feb. 11, 1873	383	123	3	169
Plow, Wheel	J. D. Harrison	143,147	Sept. 23, 1873	721	248	4	333
Plow, Wheel	F. Hasbrook	138,329	Apr. 29, 1873	992	312	3	479
Plow, Wheel	F. Hasbrook	144,453	Nov. 11, 1873	244	82	4	510
Plow, Wheel	J. H. Janes, H. Tucker, and T. D. Terry.	137,611	Apr. 8, 1873	306	95	3	393
Plow, Wheel	J. C. Pearl	141,073	July 22, 1873	673	225	4	91
Plow-wheel	M. Potter	136,179	Feb. 25, 1873	738	238	3	223

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Plow, Wheel.....	L. W. Richardson.....	141,951	Aug. 19, 1873	501	165	4	193
Plow, Wheel.....	L. Sachse.....	136,674	Mar. 11, 1873	298	99	3	278
Plow, Wheel.....	M. Sattley.....	135,594	Feb. 4, 1873	190	59	3	142
Plow, Wheel.....	H. M. Skinner.....	140,551	July 1, 1873	178	60, 61	4	23
Plow, Wheel.....	C. B. Stevens.....	139,032	May 20, 1873	512	162	3	562
Plow, Wheel.....	W. P. Sweeney.....	137,975	Apr. 15, 1873	631	199	3	433
Plow, Wheel.....	T. D. Terry, A. Case, and C. Lar- kin.....	142,964	Sept. 16, 1873	570	193	4	311
Plow, Wheel.....	J. Worrill.....	137,044	Mar. 18, 1873	622	205	3	314
Plows, Composition metal for casting.....	G. K. Smith.....	143,539	Oct. 7, 1873	122	.....	4	390
Plows, Riding-attachment for.....	A. H. Ballagh.....	145,083	Dec. 2, 1873	43	13	4	589
Plumb and level.....	S. Sanderson.....	143,933	Oct. 21, 1873	500	169	4	439
Plumb-bob.....	G. B. Cowles.....	138,790	May 13, 1873	300	92	3	532
Pneumatic-dispatch apparatus.....	C. W. Siemens.....	141,294	July 29, 1873	892	293	4	117
Pneumatic-signal apparatus.....	W. Foster, jr.....	142,224	Aug. 26, 1873	756	249	4	223
Poke, Animal.....	C. Hinman.....	134,988	Jan. 21, 1873	461	147	3	72
Poke, Animal.....	C. Hinman.....	139,893	June 17, 1873	429	133	3	666
Poke, Animal.....	J. Hopkins.....	141,438	Aug. 5, 1873	25	8	4	137
Pocket-attachment, Safety.....	R. L. Russell.....	144,702	Nov. 18, 1873	462	157	4	539
Pocket-book.....	W. H. King.....	135,990	Feb. 18, 1873	556	184	3	197
Pocket-book.....	L. Wendt.....	138,217	Apr. 22, 1873	863	273	3	460
Pocket-book clasp.....	J. F. Dubber.....	142,447	Sept. 2, 1873	113	36	4	251
Pocket-book fastening.....	F. Heiles.....	144,094	Oct. 28, 1873	664	219	4	463
Pocket-book, Safety-guard for.....	T. Potter.....	138,581	May 6, 1873	101	32	3	506
Pocket-book safety-hook.....	E. C. Likar.....	138,667	May 6, 1873	178	57	3	512
Pocket-hook, Safety.....	P. E. Malmström and P. E. Dum- mer.....	136,742	Mar. 11, 1873	354	117	3	283
Pocket-knife.....	H. Staude.....	138,052	Apr. 22, 1873	721	228	3	449
Pocket-openings, Fastening.....	J. W. Davis.....	139,121	May 20, 1873	597	188	3	569
Pocket, Safety.....	S. Engel.....	136,983	Mar. 18, 1873	566	188	3	309
Pocket, Safety.....	H. L. Hopkins.....	145,178	Dec. 2, 1873	132	43	4	596
Pole-clamp.....	H. Haering.....	134,598	Jan. 7, 1873	95	30	3	14
Police-nippers.....	J. B. Craig and M. Haughey.....	136,419	Mar. 4, 1873	56	20	3	250
Polishing-compound.....	E. J. Combs.....	144,444	Nov. 11, 1873	238	.....	4	509
Polishing-device.....	J. C. Morrison.....	139,178	May 20, 1873	654	204	3	574
Polishing-tool.....	H. Cottrell.....	144,744	Nov. 18, 1873	497	169	4	542
Polishing wood, Process of.....	C. Seebach.....	136,010	Feb. 18, 1873	573	.....	3	198
Portable elevator and dumper.....	W. H. Herriott.....	146,002	Dec. 30, 1873	891	289	4	704
Portable fountain and lawn-sprinkler.....	R. Brusie.....	137,175	Mar. 25, 1873	748	248	3	335
Portable furnace.....	H. J. Lingenfelter.....	145,954	Dec. 30, 1873	851	277	4	701
Porter's box.....	I. Bannan.....	142,888	Sept. 16, 1873	503	172	4	305
Portfolio.....	C. W. Palmer.....	140,725	July 8, 1873	339	115	4	47
Portfolio.....	L. F. Raymond.....	145,683	Dec. 16, 1873	582	191	4	656
Portfolio-holder.....	J. B. Aiken.....	142,884	Sept. 16, 1873	499	171	4	305
Portfolio, Music.....	J. C. Koch.....	135,130	Jan. 21, 1873	584	189	3	82
Portfolio, Music.....	F. C. Schumann.....	134,613	Jan. 7, 1873	106	35	3	15
Port-stopper fastening.....	J. Carver.....	141,113	July 22, 1873	709	237	4	94
Post: <i>See</i> Fence-post.							
Postage-stamp affixer.....	E. B. Morgan.....	135,143	Jan. 21, 1873	594	193	3	83
Postal-card machine.....	J. M. D. Keating.....	138,028	Apr. 22, 1873	697	221	3	447
Postal-card screen.....	L. Conroy.....	142,899	Sept. 16, 1873	513	175	4	306
Post-driver.....	I. V. Adair.....	137,120	Mar. 25, 1873	701	232	3	331
Post-hole digger.....	A. E. Lindsley.....	139,169	May 10, 1873	646	202	3	573
Post-office box.....	E. Stockwell and W. H. Taylor.....	140,092	June 17, 1873	599	189	3	680
Pot: <i>See</i> Coffee-pot. Flower-pot. Molder's pot. Mustard-pot. Painter's pot.							
Potassa, Manufacture of bitartrate of.....	L. Adler.....	145,607	Dec. 16, 1873	516	.....	4	651
Potato and peanut digger.....	C. E. Pierce.....	136,860	Mar. 18, 1873	463	154	3	301
Potato bin, Sweet.....	H. T. Basye.....	139,532	June 3, 1873	75	25	3	615
Potato-bug collector.....	J. Corbeil.....	134,854	Jan. 14, 1873	332	106	3	47
Potato-bug destroyer.....	A. A. Mixer.....	143,245	Sept. 30, 1873	810	278	4	357
Potato-bug destroyer.....	W. H. Myers.....	143,178	Sept. 23, 1873	744	257	4	335
Potato cutter and planter.....	L. J. Mewborn.....	143,707	Oct. 14, 1873	291	95	4	412
Potato-digger.....	H. G. Barrows.....	135,307	Jan. 28, 1873	757	244	3	108
Potato-digger.....	S. Bigelow and L. C. Bigelow.....	138,470	May 6, 1873	5	2	3	498
Potato-digger.....	A. G. Brush.....	136,028	Feb. 18, 1873	589	194	3	199
Potato-digger.....	H. M. Dowd and W. W. Dowd, jr.....	139,709	June 10, 1873	254	80	3	645
Potato-digger.....	E. T. Ford.....	144,083	Oct. 28, 1873	654	{ 215 216 }	4	462
Potato-digger.....	G. W. Haag.....	138,561	May 6, 1873	85	27	3	504
Potato-digger.....	J. W. Innis.....	135,558	Feb. 4, 1873	152	49	3	139
Potato-digger.....	D. M. and G. E. King.....	137,931	Apr. 15, 1873	592	187	3	430
Potato-digger.....	H. B. Norton.....	136,536	Mar. 4, 1873	165	53, 54	3	258
Potato-digger.....	J. D. Rensink.....	138,934	May 13, 1873	420	131	3	542
Potato-digger.....	L. Schafer, jr.....	138,942	May 13, 1873	425	{ 133 134 }	3	543
Potato-digger.....	S. W. Tyler.....	141,903	Aug. 19, 1873	462	151	4	190
Potato-digger.....	W. H. Wall.....	135,183	Jan. 21, 1873	625	204	3	86
Potato-digger.....	A. Willmann.....	145,037	Nov. 25, 1873	756	255	4	574
Potato-digger.....	J. S. Wright and I. Benedict.....	135,458	Feb. 4, 1873	62	20	3	132
Potato masher and strainer.....	R. Seville.....	140,169	June 24, 1873	686	215	3	695
Potato-screen.....	G. Claffin.....	140,886	July 15, 1873	482	163	4	67
Potato-sorting machine.....	D. M. King.....	143,357	Sept. 30, 1873	913	310	4	365
Pottery-stock, Machine for preparing.....	S. R. Thompson.....	138,824	May 13, 1873	327	101	3	534
Poudrette-dryer.....	L. Duvall.....	139,555	June 3, 1873	94	32	3	616
Powder: <i>See</i> Baking-powder. Disinfecting powder. Insect-powder. Yeast-powder.							
Powder-flask.....	M. Cilik.....	142,614	Sept. 9, 1873	267	87	4	275

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Powder-flask	T. L. Sturtevant	137, 332	Apr. 1, 1873	53	16	3	361
Powder-keg	C. Green and W. Wilson, jr.	140, 913	July 15, 1873	510	172	4	69
Power:							
<i>See</i> Animal-power.							
Churn-power.							
Foot-power.							
Horse-power.							
Mechanical power.							
Motive-power.							
Sewing-machine power.							
Spring-power.							
Thrashing-power.							
Wave-power.							
Wind-wheel power.							
Power, Apparatus for transferring	E. B. Clark	145, 721	Dec. 23, 1873	626	205	4	672
Power, Device for transmitting	J. C. Clime	135, 466	Feb. 4, 1873	69	22	3	133
Power, Mechanism for transmitting	D. E. Myers	136, 334	Feb. 25, 1873	869	286	3	233
Power, Mechanism for transmitting	J. Rankin	143, 640	Oct. 14, 1873	222	74, 75	4	407
Preserve-can	J. K. Chace	141, 994	Aug. 19, 1873	534	177	4	196
Preserving and drying lumber	J. Oliver	142, 347	Sept. 2, 1873	21	8	4	244
Preserving and packing compound for eggs, wood, &c.	J. Connell, jr.	139, 116	May 20, 1873	593	.....	3	569
Preserving-can, Fruit, &c.	W. H. Hammond	134, 799	Jan. 14, 1873	283	92	3	43
Preserving corn, Process for	L. McMurray	139, 595	June 3, 1873	130	.....	3	619
Preserving fruit and vegetables for food	W. G. Barbee	144, 592	Nov. 18, 1873	371	.....	4	531
Preserving fruit, Apparatus for	L. C. Cooley	139, 547	June 3, 1873	88	30	3	616
Preserving fruit, vegetables, &c.	A. T. Jones and L. C. Cooley	139, 581	June 3, 1873	117	.....	3	618
Preserving green-corn and other vegetables	G. L. Merrill and O. F. Soule	145, 581	Dec. 16, 1873	495	162	4	649
Preserving wood, Compound for	L. S. Fales	142, 453	Sept. 2, 1873	117	.....	4	252
Press:							
<i>See</i> Baling-press.							
Beater-press.							
Book-holding press.							
Brick-press.							
Butter-print press.							
Cheese and fruit press.							
Cider-press.							
Cloth-press.							
Copying and folding press.							
Cotton-press.							
Cylinder-press.							
Embossing-press.							
Fruit-press.							
Furnace-block press.							
Glass-press.							
Hat-press.							
Hay-press.							
Hydraulic-wheel press.							
Jeweler's hand-press.							
Lithographic-press.							
Meat-press.							
Meat or fruit press.							
Oil-press.							
Photograph burnishing-press.							
Printing-press.							
Tobacco-press.							
Wine-press.							
Press	R. Esmond	142, 220	Aug. 26, 1873	752	248	4	223
Press	J. B. Godwin	140, 033	June 17, 1873	542	172	3	676
Press	E. B. Platt	138, 432	Apr. 29, 1873	1, 079	341	3	486
Press	W. E. Warner	137, 641	Apr. 8, 1873	330	102	3	395
Press, Lever for	J. P. Gates	136, 431	Mar. 4, 1873	67	24	3	251
Press, Operating	O. T. Earle and T. J. Rider	142, 093	Aug. 26, 1873	649	213	4	214
Presser-block for pants	L. Cohen and J. C. Waller	137, 346	Apr. 1, 1873	63	20	3	362
Pressure-gage	G. H. Crosby	145, 726	Dec. 23, 1873	630	{ 206 207 }	4	672
Pressure-gage	G. Sewell	142, 128	Aug. 26, 1873	677	223	4	217
Pressure-gage	J. W. Stiles	137, 331	Apr. 1, 1873	52	15	3	361
Pressure-gage and alarm	M. Toulmin	142, 969	Sept. 16, 1873	575	194	4	311
Pressure-gage dial	J. Annin	140, 867	July 15, 1873	465	157	4	65
Printer and stamp, Electro-magnetic date-time	J. C. Hinchman	141, 352	July 29, 1873	953	{ 309 311 }	4	121
Printer's chase	L. G. Chaput	139, 542	June 3, 1873	83	29	3	616
Printer's chase	E. A. Warren	138, 967	May 13, 1873	446	140	3	544
Printer's furniture	H. A. Hempel	145, 800	Dec. 23, 1873	693	227	4	678
Printer's furniture	H. P. Montague	141, 450	Aug. 5, 1873	37	11	4	138
Printer's galley-rest	J. A. Doyle and J. A. Murphy	143, 228	Sept. 30, 1873	796	274	4	355
Printer's galley side-stick	R. B. Hindle	140, 368	July 1, 1873	28	9	4	10
Printer's lead-casting machine	J. I. Sturgis	135, 384	Jan. 28, 1873	31	268	3	114
Printer's lead-rack	O. A. Dearing	135, 894	Feb. 18, 1873	479	155	3	191
Printer's leads, Apparatus for casting	W. Filmer	142, 783	Sept. 16, 1873	421	142	4	298
Printer's miter-machine	J. A. Stansbury	137, 575	Apr. 8, 1873	277	85	3	391
Printer's quoin	C. W. Ames	139, 351	May 27, 1873	813	260	3	504
Printer's rule	C. Reuter	142, 512	Sept. 2, 1873	171	55	4	255
Printer's rule, Machine for preparing	J. B. Bancroft	145, 549	Dec. 16, 1873	471	154	4	647
Printer's side-stick and quoin	F. Keehn	145, 574	Dec. 16, 1873	489	161	4	649
Printing and dyeing fabric	T. Crossley	139, 705	June 10, 1873	251	.....	3	645
Printing, Inking-attachment for chromatic	E. A. Howitt	139, 155	May 20, 1873	634	198	3	572
Printing-machine, Automatic time	J. C. Hinchman	139, 153	May 20, 1873	629	{ 196 197 }	3	572
Printing-machine, Automatic time	J. C. Hinchman	139, 154	May 20, 1873	631	197	3	572
Printing on solid or inflexible surfaces, Apparatus for	A. Wilbaux	142, 541	Sept. 2, 1873	196	63	4	257
Printing-plate, Removing ink from engraved	J. S. Ives	144, 544	Nov. 11, 1873	323	.....	4	516
Printing-plate, Typographical	J. L. Ringwalt	140, 542	July 1, 1873	170	57	4	22
Printing-press	F. L. Bailey and J. Watson	135, 618	Feb. 11, 1873	223	69	3	157
Printing-press	C. B. Cottrell	140, 813	July 15, 1873	424	143	4	62

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Printing-press	W. H. Golding	145, 101	Dec. 2, 1873	58	18, 19	4	590
Printing-press	G. A. Hunt	139, 156	May 20, 1873	635	198	3	572
Printing-press	W. A. Kelsey	138, 660	May 6, 1873	170	55	3	511
Printing-press	F. C. Penfield	138, 689	May 6, 1873	197	62	3	513
Printing-press	J. G. Peterson	142, 648	Sept. 9, 1873	293	96	4	277
Printing-press, Apparatus for delivering sheets from ..	T. J. Mayall	146, 085	Dec. 30, 1873	961	{ 310 311 }	4	710
Printing-press attachment, Chromatic	E. A. Howitt	134, 602	Jan. 7, 1873	99	32	3	15
Printing-press, Card and ticket	G. E. Peck	143, 780	Oct. 21, 1873	373	{ 123 124 }	4	429
Printing-press, Chromatic	T. H. Burrledge and J. M. Kershaw ..	140, 242	June 24, 1873	744	235	3	700
Printing-press, Chromatic	G. W. Woodside	134, 579	Jan. 7, 1873	74	23	3	13
Printing-press, Copper-plate	T. S. Bates	145, 610	Dec. 16, 1873	518	170	4	651
Printing-press, Fabric	H. H. Townsend	137, 638	Apr. 8, 1873	328	101	3	395
Printing-press feeder	F. L. Heughes	141, 713	Aug. 12, 1873	278	91	4	166
Printing-press feeder	R. J. Stuart	137, 156	Mar. 25, 1873	728	242	3	333
Printing-press feed-gage	G. N. Morris	145, 890	Dec. 23, 1873	772	252	4	684
Printing-press feed-gage	G. Wilcox	143, 652	Oct. 14, 1873	232	78	4	408
Printing-press, Feeding paper to	C. H. Stoddard and E. D. Norton ..	140, 962	July 15, 1873	562	188	4	73
Printing-press, Feeding paper to rotary	J. T. Ashley	144, 822	Nov. 25, 1873	573	{ 195 196 }	4	558
Printing-press, Hand	W. and W. H. Dunkerly, jr.	137, 664	Apr. 8, 1873	352	109	3	397
Printing-press, Hand	N. Ross	134, 705	Jan. 7, 1873	193	63	3	22
Printing-press inking-apparatus	M. England	145, 341	Dec. 9, 1873	276	92	4	620
Printing-press, Inking-apparatus for oscillating ..	G. W. Prouty	141, 077	July 22, 1873	678	227	4	92
Printing-press, Inking-apparatus for rotary	E. Allen	142, 607	Sept. 9, 1873	261	86	4	275
Printing-press, Plate	G. C. Howard and J. Dainty	139, 392	May 27, 1873	853	273	3	598
Printing-press registering attachment	A. Hilgenreiner	143, 904	Oct. 21, 1873	477	161	4	437
Printing-press, Rotary	S. H. Bingham	139, 360	May 27, 1873	820	262	3	595
Printing-press, Rotary	W. Braidwood and H. J. Hewitt ..	141, 314	July 29, 1873	910	298	4	118
Printing-press, Rotary	W. Braidwood and H. J. Hewitt ..	141, 315	July 29, 1873	912	299	4	118
Printing-press, Rotary	C. C. Child	144, 742	Nov. 18, 1873	494	168	4	541
Printing-press, Rotary	C. B. Cottrell	137, 347	Apr. 1, 1873	64	20	3	362
Printing-press, Stop-cylinder	H. Barth	139, 229	May 27, 1873	709	{ 223 224 }	3	586
Prison-door bolt	T. Lalor	144, 210	Nov. 4, 1873	36	11	4	481
Privies, sinks, &c., Apparatus for cleaning	R. R. Retowsky	143, 420	Oct. 7, 1873	23	9	4	382
Privy and sink cleaning apparatus	A. M. Hobbs	137, 680	Apr. 8, 1873	366	113	3	398
Privy-indicator	W. C. Duffield	136, 224	Feb. 25, 1873	770	249	3	225
Projectile	S. H. Haycock	137, 442	Apr. 1, 1873	146	47	3	369
Projectile	J. G. Hope	142, 394	Sept. 2, 1873	66	22	4	247
Projectile, Compound explosive	F. A. Markley	138, 907	May 13, 1873	308	126	3	540
Propeller, Chain	E. P. Russell	142, 653	Sept. 9, 1873	298	98	4	278
Propeller, Endless-chain	T. Teed	143, 793	Oct. 21, 1873	384	127	4	430
Propeller, Endless-chain	J. W. Whinyates	137, 269	Mar. 25, 1873	835	274	3	341
Propeller for vessel, Chain	T. W. Carter	140, 468	July 1, 1873	106	36	4	17
Propeller for vessel, Vibrating	D. Bainbridge	135, 257	Jan. 28, 1873	719	230	3	105
Propeller for vessel, Vibrating	J. D. Fraser	145, 342	Dec. 9, 1873	277	93	4	620
Propeller, Mechanism for operating screw	J. Wilcoxon	139, 098	May 20, 1873	575	180	3	567
Propeller, Screw	D. Freed	141, 871	Aug. 19, 1873	437	143	4	187
Propeller, Screw	J. Hartman, jr	137, 365	Apr. 1, 1873	79	26	3	363
Propeller, Screw	N. A. Patterson	135, 149	Jan. 21, 1873	599	195	3	53
Propeller, Screw	N. A. Patterson	142, 269	Aug. 26, 1873	793	{ 261 262 }	4	226
Propeller, Screw	H. K. Stevens and S. Miller	142, 820	Sept. 16, 1873	448	151	4	300
Propeller, Screw	M. M. Wilson	136, 015	Feb. 18, 1873	579	191	3	199
Propeller, Steering	J. L. Cathcart	135, 404	Feb. 4, 1873	8	3	3	128
Propeller, Steering	F. G. Fowler	143, 896	Oct. 21, 1873	471	158	4	437
Propeller, Steering	W. Harsen	144, 538	Nov. 11, 1873	317	108	4	515
Propeller, Vessel	E. C. Hubbard	135, 555	Feb. 4, 1873	149	48	3	139
Propeller, Vibrating	C. P. Macowitzky	135, 994	Feb. 18, 1873	559	185	3	197
Propeller, Means for operating screw	A. McDonald	145, 000	Nov. 25, 1873	722	244	4	571
Propeller, Means of elevating and depressing ..	S. G. Hill	141, 558	Aug. 5, 1873	129	40	4	146
Propeller, Mechanism for operating screw	F. H. Tobias	145, 697	Dec. 16, 1873	594	194	4	658
Propelling boats	A. Beekman	143, 270	Sept. 30, 1873	832	286	4	359
Propelling boats, Means for	J. Black and G. W. Jones	144, 732	Nov. 18, 1873	486	164	4	541
Propelling canal-boat	J. S. Anderson	137, 164	Mar. 25, 1873	736	245	3	334
Propelling canal-boat	A. Ames	134, 504	Jan. 7, 1873	1	1	3	7
Propelling canal-boat	H. H. Baker	139, 996	June 17, 1873	509	161	3	673
Propelling canal-boat	A. Johnson	136, 064	Feb. 18, 1873	620	204	3	202
Propelling canal-boat	W. F. Miller	139, 727	June 10, 1873	271	85	3	647
Propelling canal-boat	O. C. Smith	143, 038	Sept. 23, 1873	637	218	4	326
Propelling canal-boat and other vessels	L. Bastet	144, 248	Nov. 4, 1873	70	22	4	483
Propelling device, Vessel	B. T. Babbitt	139, 994	June 17, 1873	508	161	3	673
Propelling mechanism, Vessel	L. Murdoch	143, 091	Sept. 23, 1873	680	234	4	330
Propelling mechanism, Vessel	J. Weich	136, 475	Mar. 4, 1873	106	35	3	254
Propelling vessels	H. C. Camp	134, 730	Jan. 14, 1873	227	73	3	39
Propelling vessels	G. W. Dow	141, 039	July 22, 1873	643	216	4	89
Propelling vessels	J. W. Evans	141, 340	July 29, 1873	942	306	4	120
Propelling vessels	S. Gerhard	137, 359	Apr. 1, 1873	74	24	3	363
Propulsion by gas-explosion	W. A. Leggo	138, 665	May 6, 1873	176	56	3	512
Propulsion of vessels	G. B. D. Boucherville	143, 440	Oct. 7, 1873	38	15	4	384
Propulsion of vessels	C. P. Macowitzky	146, 009	Dec. 30, 1873	898	291	4	704
Propulsion of vessels by direct action of steam ..	G. W. Jones	145, 210	Dec. 2, 1873	153	52	4	597
Protector:							
See Bottle-protector.							
Broom-protector.							
Carriage-protector.							
Chest-protector.							
Dress-protector.							
Ear-protector.							
Eye and lung protector.							
King-bolt protector.							
Plant-protector.							
Sap-protector.							

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Protector—Continued.							
See Skirt-protector.							
Tree-protector.							
Wall-protector.							
Pruning-hook	J. Christy	143, 962	Oct. 28, 1873	548	182	4	453
Pruning-implement	A. P. Bettersworth	143, 659	Oct. 14, 1873	238	80	4	408
Pruning-implement	A. C. Hulse and J. S. Crum	142, 915	Sept. 16, 1873	525	179	4	307
Pruning-instrument	W. H. Collings	143, 064	Sept. 23, 1873	661	226	4	328
Pruning-knife	J. S. Crum	139, 119	May 20, 1873	596	187	3	569
Pruning-knife	A. C. Hulse	142, 236	Aug. 26, 1873	768	252	4	224
Pruning-shears	W. Baker	142, 886	Sept. 16, 1873	501	171	4	305
Pruning-shears	W. E. Ball	143, 114	Sept. 23, 1873	699	240	4	331
Pruning-shears	T. Borden	136, 209	Feb. 25, 1873	760	245	3	225
Pruning-shears	P. Broadbooks	137, 821	Apr. 15, 1873	502	156	3	422
Pruning-shears	O. Chase	134, 591	Jan. 7, 1873	87	27	3	14
Pruning-shears	M. De Groodt	136, 820	Mar. 18, 1873	432	143	3	298
Pruning-shears	H. C. Hills	141, 273	July 29, 1873	876	287	4	115
Pruning-shears	M. C. Malone	138, 338	Apr. 29, 1873	998	314	3	480
Pruning-shears	W. McCray	138, 340	Apr. 29, 1873	1,000	315	3	480
Pruning-shears	A. R. Moulton	134, 922	Jan. 14, 1873	393	125	3	51
Pruning-shears	J. G. Rogers	140, 388	July 1, 1873	45	15	4	15
Pruning-shears	G. Vanfossen	140, 974	July 15, 1873	573	193	4	74
Puddler, Rotary	W. and G. H. Sellers	144, 416	Nov. 11, 1873	213	72	4	507
Puddler's ball-roller	R. M. Bassett	139, 356	May 27, 1873	817	261	3	595
Puddler's ball-squeezer	F. Danks	141, 207	July 29, 1873	811	265 266	4	110
Puddling and boiling furnace, Door and bit of	J. G. Haberfield	139, 244	May 27, 1873	726	229	3	587
Puddling and boiling furnace, Fettling for	J. C. McAninch and G. Atkins	136, 083	Feb. 18, 1873	637		3	203
Puddling-furnace	J. Heatley	139, 788	June 10, 1873	328	102	3	651
Puddling-furnace	C. Jones	140, 140	June 24, 1873	659	207	3	693
Puddling-furnace	E. Loyd	135, 650	Feb. 11, 1873	250	79	3	159
Puddling-furnace	E. Riley	143, 301	Sept. 30, 1873	859	294	4	361
Puddling-furnace door	J. S. Rees	140, 730	July 8, 1873	342	116	4	47
Puddling-furnace, Lining rotary	S. Danks	136, 421	Mar. 4, 1873	58		3	250
Puddling, melting, and heating furnace, Rotary	S. Danks	142, 152	Aug. 26, 1873	696	229 230	4	218
Pug-mill	D. H. Gage	138, 628	May 6, 1873	140	46	3	509
Puller:							
See Stone-puller.							
Pulley	C. C. Moore	135, 722	Feb. 11, 1873	313	99	3	164
Pulley	M. K. Whipple	137, 270	Mar. 25, 1873	837	275	3	341
Pulley, Band	C. H. Perkins	135, 151	Jan. 21, 1873	600	195	3	83
Pulley, Band	E. P. West	134, 778	Jan. 14, 1873	265	86	3	41
Pulley-block	E. A. Barrett	135, 066	Jan. 21, 1873	533	173	3	78
Pulley-block	A. S. Dickinson	143, 441	Oct. 7, 1873	38	14	4	384
Pulley-block	G. A. Ford	142, 095	Aug. 26, 1873	650	214	4	214
Pulley, Clothes-line	G. H. Ryer	139, 024	May 20, 1873	507	160	3	562
Pulley, Dynamometer	I. P. Tice	137, 393	Apr. 1, 1873	103	33	3	365
Pulley, Expanding	J. E. Fales	137, 352	Apr. 1, 1873	69	22	3	362
Pulley for gas-machine, &c., Adjustable	E. F. Van Houten	141, 967	Aug. 19, 1873	512	169	4	194
Pulley, Friction-clutch	J. D. Crocker	139, 456	June 3, 1873	10	3	3	609
Pulley-hanger	J. Kent	139, 898	June 17, 1873	436	135	3	667
Pulley, Loose	L. Knight	140, 048	June 17, 1873	558	176	3	677
Pulley, Lubricating	J. K. McLanahan	143, 830	Oct. 21, 1873	417	139	4	432
Pulley, Lubrication of clutch	A. Canis and F. Higgins	136, 699	Mar. 11, 1873	317	105	3	280
Pulley, Suspension	J. A. Everts	144, 078	Oct. 28, 1873	651	214	4	461
Pulley to shaft, &c., Friction-attachment for securing	H. Cox	139, 704	June 10, 1873	251	79	3	645
Pulley to shaft, Securing	W. B. Van Voorhis	139, 282	May 27, 1873	762	241	3	590
Pulley-wheels, Mode of constructing wooden	A. Newell	138, 518	May 6, 1873	47	16	3	501
Pulleys, Machine for turning	G. A. Gray, jr.	138, 394	Apr. 29, 1873	1,043	328	3	483
Pulp, paste, or slip pigment, Preservation of	P. C. Tiemann	143, 106	Sept. 23, 1873	692		4	331
Pulp, Process of reducing wood-fiber to	T. B. Armitage	139, 646	June 10, 1873	191		3	640
Pulp, Wood-grinding machine for making	S. B. Zimmer	141, 976	Aug. 19, 1873	518	172	4	194
Pulverizer, Land	T. R. Denby	137, 764	Apr. 15, 1873	453	141	3	418
Pulverizing machine, Clay	G. C. Bovey	139, 110	May 20, 1873	585	183	3	568
Pulverizing machine, Soil	A. C. Tower	138, 301	Apr. 29, 1873	968	304	3	477
Pump	J. S. Barden	134, 626	Jan. 7, 1873	116	38	3	16
Pump	W. D. Baxter	137, 527	Apr. 8, 1873	234	71	3	387
Pump	J. F. Carll	138, 477	May 6, 1873	11	4	3	498
Pump	F. Catudal	134, 785	Jan. 14, 1873	272	89	3	42
Pump	H. T. Coleman	140, 016	June 17, 1873	527	167	3	674
Pump	G. W. Douglas	144, 965	Nov. 25, 1873	691	233	4	568
Pump	J. Edson	143, 751	Oct. 21, 1873	348	116	4	427
Pump	A. L. Hatfield	143, 759	Oct. 21, 1873	355	118	4	427
Pump	T. C. H. Kraus	142, 028	Aug. 19, 1873	567	187	4	198
Pump	S. Lane, jr.	143, 769	Oct. 21, 1873	364	121	4	428
Pump	H. Norman and C. F. Dietrich	136, 258	Feb. 25, 1873	801	260	3	228
Pump	C. D. Rathbone	140, 643	July 8, 1873	273	92	4	42
Pump	E. G. Russell	142, 123	Aug. 26, 1873	674	221	4	216
Pump	C. W. Sholes and H. C. Kelly	145, 247	Dec. 2, 1873	187	64	4	600
Pump	J. J. Walton	145, 918	Dec. 23, 1873	797	261	4	686
Pump	E. C. Wharton	144, 171	Oct. 28, 1873	727	243	4	468
Pump	E. C. Wharton	145, 921	Dec. 23, 1873	800	262	4	686
Pump	J. Wolford and R. Conner	141, 514	Aug. 5, 1873	92	28	4	142
Pump, Acid	F. Nichols	136, 934	Mar. 18, 1873	525	173	3	305
Pump, Air	G. E. Barker and S. F. Mack	145, 926	Dec. 30, 1873	825	269	4	699
Pump and condenser, Steam	E. Reese	137, 796	Apr. 15, 1873	481	150	3	420
Pump and condenser, Steam air	S. Gibbons	142, 333	Sept. 2, 1873	10	4	4	243
Pump and engine, Air	T. Beach	137, 123	Mar. 25, 1873	703	233	3	331
Pump and fire-engine	S. Weirick and H. Lathrope	139, 840	June 10, 1873	373	116	3	654
Pump and funnel, Combined atmospheric exhaust	G. H. Randall	136, 264	Feb. 25, 1873	811	262	3	228
Pump, Attachment for direct-acting steam	O. T. Earle	142, 092	Aug. 26, 1873	648	213	4	214
Pump, Barge	C. P. Gaver	143, 069	Sept. 23, 1873	664	228	4	328
Pump-box	W. A. Spooner	145, 133	Dec. 2, 1873	91	29	4	592

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Pump-bracket	S. Selden and O. R. Hanchett	142,286	Aug. 26, 1873	806	267	4	227
Pump, Compound high and low pressure steam	A. J. L. Loretz	139,071	May 20, 1873	552	174	3	565
Pump, Compound steam	A. J. L. Loretz	139,070	May 20, 1873	551	173	3	565
Pump-cylinder, Lining for	W. S. Owen	145,895	Dec. 23, 1873	777	254	4	684
Pump, Direct-acting steam	O. T. Earle	142,091	Aug. 26, 1873	647	212	4	214
Pump, Double-acting	P. M. Barker	139,650	June 10, 1873	194	63	3	641
Pump, Double-acting	K. Nolan	135,146	Jan. 21, 1873	597	194	3	83
Pump, Double-acting force	J. P. Flanders	140,819	July 15, 1873	428	145	4	62
Pump, Force	O. Snell	141,394	July 29, 1873	992	322	4	124
Pump for driven well	J. W. Harrington and J. A. Yingling	143,345	Sept. 30, 1873	903	307	4	364
Pump for mines, Portable	W. E. Sidney	143,724	Oct. 14, 1873	306	101	4	413
Pump, Glass piston and its packing for	A. E. Gay	140,697	July 8, 1873	316	107	4	45
Pump, Hand-lever attachment for steam	O. T. Earle	142,562	Sept. 9, 1873	225	73	4	272
Pump-handle	I. N. Frazer	135,269	Jan. 28, 1873	728	233	3	106
Pump, Lift and force	A. H. Powell	134,927	Jan. 14, 1873	397	126	3	52
Pump, Means of operating ship's	S. R. Deverell	135,094	Jan. 21, 1873	550	179	3	80
Pump, Mining	G. E. Mills	138,037	Apr. 22, 1873	707	223	3	448
Pump operated by exhaust steam, Steam vacuum	W. Burdon	135,203	Jan. 28, 1873	665	214	3	101
Pump or blower, Rotary	A. Brear	145,617	Dec. 16, 1873	525	172	4	652
Pump or engine, Rotary	W. P. Maxson	141,155	July 22, 1873	750	247	4	97
Pump or syringe, Hand	W. B. Robins	139,263	May 27, 1873	742	235	3	588
Pump-piston	W. C. Culbertson	142,004	Aug. 19, 1873	545	180	4	196
Pump-piston	C. B. Gill	135,905	Feb. 18, 1873	487	158	3	191
Pump-plunger and pump	N. P. Sheldon	140,795	July 15, 1873	404	137	4	60
Pump, Quicksilver	M. P. Boss	145,718	Dec. 23, 1873	623	204	4	672
Pump, Reaction	E. Rhodes, jr.	134,770	Jan. 14, 1873	258	84	3	41
Pump, Rivet-pocket for oil-well	W. H. Birge	134,970	Jan. 21, 1873	446	142	3	71
Pump, Rotary	L. Chapman	137,054	Mar. 25, 1873	639	211	3	326
Pump, Rotary	L. Chapman	137,055	Mar. 25, 1873	640	212	3	327
Pump, Rotary	L. Chapman	137,057	Mar. 25, 1873	641	213	3	327
Pump, Rotary	L. Chapman	137,058	Mar. 25, 1873	642	213	3	327
Pump, Rotary	J. E. Gillespie	141,000	July 22, 1873	609	205	4	86
Pump, Rotary	C. P. Holmes	142,696	Sept. 9, 1873	334	112	4	281
Pump, Siphon	J. M. Bois	136,809	Mar. 18, 1873	423	140	3	298
Pump, Steam	W. Aldrich	139,103	May 20, 1873	579	182	3	568
Pump, Steam	W. Arthur	135,061	Jan. 21, 1873	529	171	3	78
Pump, Steam	R. Eickemeyer	138,622	May 6, 1873	134	44	3	508
Pump, Steam	J. W. Handren	134,746	Jan. 14, 1873	239	77	3	40
Pump, Steam	J. W. Handren	135,426	Feb. 4, 1873	30	9	3	130
Pump, Steam	B. S. Lawson	145,806	Dec. 23, 1873	697	229	4	678
Pump, Steam	G. J. Roberts	138,695	May 6, 1873	201	63, 64	3	514
Pump, Steam and vacuum	A. J. Simmons	143,725	Oct. 14, 1873	307	101	4	413
Pump, Steam vacuum	W. Burdon	135,198	Jan. 28, 1873	660	213	3	101
Pump, Steam vacuum	W. Burdon	135,199	Jan. 28, 1873	661	213	3	101
Pump, Steam vacuum	W. Burdon	135,200	Jan. 28, 1873	662	213	3	101
Pump, Steam vacuum	W. Burdon	135,201	Jan. 28, 1873	663	214	3	101
Pump, Steam vacuum	W. Burdon	135,202	Jan. 28, 1873	664	214	3	101
Pump, Steam vacuum	W. Burdon	139,235	May 27, 1873	718	226	3	587
Pump, Steam vacuum	W. Burdon	141,540	Aug. 5, 1873	113	35, 36	4	144
Pump, Steam vacuum	J. R. Little	136,441	Mar. 4, 1873	75	26	3	251
Pump, Steam vacuum	W. E. Prall and D. A. Burr	146,095	Dec. 30, 1873	974	314	4	711
Pump, Steam vacuum	J. K. Simpson and S. N. Drake	134,568	Jan. 7, 1873	63	19	3	12
Pump, Steam vacuum	I. P. Tice	136,344	Feb. 25, 1873	880	283	3	234
Pump, Strainer for ship's bilge	S. J. Chapman	142,438	Sept. 2, 1873	102	33	4	250
Pump, Submerged	J. A. Morrell and J. Brewer	141,807	Aug. 12, 1873	364	120	4	172
Pump, Submerged force	A. T. Hafford	139,003	May 20, 1873	491	155	3	561
Pumps, Cylinder for lining wooden	R. W. Wheeler	140,802	July 15, 1873	410	139	4	61
Pumps, Sucker-rod joint for	A. M. Williams	144,813	Nov. 18, 1873	554	188	4	546
Pumping-engine, Steam	W. C. Hicks	143,824	Oct. 21, 1873	409	137	4	431
Pumping-engine, Steam	A. J. L. Loretz	134,689	Jan. 7, 1873	180	58, 59	3	21
Punch and cutter, Leather	H. S. Fickett	134,794	Jan. 14, 1873	279	91	3	43
Punch and cutting nippers, Hand	J. O. Reilly	139,079	May 20, 1873	561	176	3	566
Punch, Belt	A. N. Southwick	135,734	Feb. 11, 1873	322	103	3	165
Punch for metal, Hand	S. F. Leach	145,578	Dec. 16, 1873	492	162	4	649
Punch, Portable	J. J. Safely	138,201	Apr. 22, 1873	849	269	3	459
Punch, Ticket	H. W. Hewet	135,549	Feb. 4, 1873	145	46	3	139
Punching and shearing machine	S. R. Houser	143,510	Oct. 7, 1873	94	33	4	388
Punching and shearing machine	J. Kissel	143,985	Oct. 28, 1873	569	189	4	455
Punching and shearing machine, Combined	W. Lyon	142,926	Sept. 16, 1873	535	183	4	308
Punching and shearing machine, Combined	C. Swanson	145,694	Dec. 16, 1873	591	193	4	657
Punching-die, Manufacture of	R. J. Mullin	142,407	Sept. 2, 1873	77	25	4	248
Punching-machine	R. Baird	136,954	Mar. 18, 1873	542	179	3	307
Punching-machine	J. M. Laughlin	142,403	Sept. 2, 1873	74	24	4	248
Punching-machine	S. W. Murray	136,172	Feb. 25, 1873	732	236	3	222
Punching-machine	W. Wojceski	142,317	Aug. 26, 1873	831	276	4	229
Punching-machine feeding-device	W. B. Bement	137,407	Apr. 1, 1873	113	37	3	366
Punching-machine, Metal	J. Clark	141,629	Aug. 12, 1873	209	66	4	160
Punching sheet-metal, Machine for	M. Stephens	143,473	Oct. 7, 1873	62	22	4	386
Putty-knife and sprig-box, Combined	J. H. Gaches	136,499	Mar. 4, 1873	128	41	3	256
Pyrotechnic signal	A. Lamarre	144,030	Oct. 28, 1873	610	.....	4	458
Pyroxyline articles, Manufacturing	J. W. Hyatt	138,254	Apr. 29, 1873	922	291	3	474
Q.							
Quartz-mill	T. O. Cutler	143,336	Sept. 30, 1873	888	304	4	363
Quartz-mill feeder	T. A. Cochran	139,370	May 27, 1873	827	265	3	596
Quicksilver from amalgam, Apparatus for separating	M. B. Howard	139,314	May 27, 1873	787	251	3	592
Quicksilver, Process of purifying	J. B. Randol and C. W. Wright	144,923	Nov. 25, 1873	658	.....	4	566
Quilting-frame	B. Blackstone	138,369	Apr. 29, 1873	1,024	322	3	482
Quilting-frame	W. Hudson	140,137	June 24, 1873	658	207	3	693
Quilting-frame	G. Phillips	142,411	Sept. 2, 1873	79	26	4	249

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R.							
Rack:							
<i>See</i> Card-rack.							
Curtain-cord rack.							
Curtain-fixture rack.							
Dry-goods rack.							
Hat-rack.							
Journal-packing rack.							
Music-rack.							
Printer's lead-rack.							
Toilet-rack.							
Towel-rack.							
Towel and clothes rack.							
Whip-rack.							
Radiator, Indirect steam	J. H. Mills	145,961	Dec. 30, 1873	857	279	4	701
Radiator, Steam	R. Berryman	135,758	Feb. 11, 1873	343	110	3	166
Radiator, Steam	L. S. Daniels	135,633	Feb. 11, 1873	235	74	3	158
Radiator, Steam	E. L. Hinckley	135,645	Feb. 11, 1873	247	78	3	159
Radiator, Steam	A. L. Ide	144,981	Nov. 25, 1873	704	238	4	570
Radiator, Steam	J. P. Wilson	138,722	May 6, 1873	230	71	3	516
Rag-cutters, Scythe-holder for	E. D. Aldrich	145,475	Dec. 16, 1873	397	131	4	641
Rag or paper engine, Bed-plate for	G. A. Corser	135,631	Feb. 11, 1873	234	74	3	158
Rails, Machine for dressing wood	H. G. Angle	142,608	Sept. 9, 1873	262	86	4	275
Railway-bed	J. W. Kern	136,067	Feb. 18, 1873	624	205	3	202
Railway-brake, Hydraulic	G. P. Renshaw	136,617	Mar. 11, 1873	248	84	3	274
Railway cattle-guard	T. D. Kline	141,566	Aug. 5, 1873	136	43	4	146
Railway cattle-guard	I. C. Tunison and A. Reeve	142,596	Sept. 9, 1873	252	82	4	274
Railway cattle-guard	R. M. York	138,308	Apr. 29, 1873	974	306	3	478
Railway-chair	D. D. Eldridge	136,426	Mar. 4, 1873	61	22	3	250
Railway-chair	S. Ferris	145,936	Dec. 16, 1873	835	272	4	699
Railway-chair	D. M. Graham	144,332	Nov. 4, 1873	132	44	4	489
Railway-chair	S. Huber	141,275	July 29, 1873	877	287	4	115
Railway-chair	W. Huffman	142,235	Aug. 26, 1873	767	252	4	224
Railway-chair	E. D. Mann	135,230	Jan. 28, 1873	694	223	3	103
Railway-chair	W. A. Rowland	138,698	May 6, 1873	204	64	3	514
Railway-chair	L. B. Tyng	142,359	Sept. 2, 1873	34	12	4	245
Railway coupling-link, Machine for forming	P. H. Healy	139,005	May 20, 1873	493	155	3	561
Railway-crossing	J. Brahn	145,781	Dec. 23, 1873	679	222	4	676
Railway-crossing	G. Elliot	136,227	Feb. 25, 1873	773	250	3	226
Railway-crossing	R. J. Hughes	139,716	June 10, 1873	259	81	3	645
Railway-crossing	J. Wood	139,643	June 3, 1873	174	57	3	623
Railway-crossing gate	W. F. Morgan	138,677	May 6, 1873	187	60	3	512
Railway-crossings, Gate for	J. B. Powell	138,527	May 6, 1873	54	18	3	502
Railway-crossing signal, Automatic	R. Walker	137,808	Apr. 15, 1873	490	153	3	421
Railway dust-preventer	J. Wellby	136,013	Feb. 18, 1873	577	190	3	199
Railway, Elevated arch	E. J. Hulbert and A. N. N. Aubin	137,552	Apr. 8, 1873	256	78, 79	3	389
Railway, Endless rolling-gear for	J. Frye	136,052	Feb. 18, 1873	609	200	3	201
Railway-frog	W. B. Atkinson	138,835	May 13, 1873	338	104	3	535
Railway-frog	G. W. Billings	137,882	Apr. 15, 1873	550	172	3	426
Railway-frog	J. Brahn	139,291	May 27, 1873	770	244	3	591
Railway-frog	T. J. and G. M. Clark	140,574	July 8, 1873	214	71	4	37
Railway-frog	J. H. Lakey	137,085	Mar. 18, 1873	671	223	3	329
Railway-frog	H. J. Skinner and S. J. Gifford	139,271	May 27, 1873	752	238	3	589
Railway-frog	J. Wood	140,332	June 24, 1873	825	262	3	707
Railway-frog	J. Wood	145,041	Nov. 25, 1873	760	257	4	574
Railway-frog	J. Woodville	140,230	June 24, 1873	734	232	3	700
Railway-gage	L. Kayser	143,287	Sept. 30, 1873	844	291	4	360
Railway-gate	J. Beamisdarfer, sr.	135,620	Feb. 11, 1873	224	70	3	157
Railway-gate	C. S. Currie	137,534	Apr. 8, 1873	241	74	3	388
Railway-gate	A. Houts	142,466	Sept. 2, 1873	130	42	4	252
Railway, Platform carrier for endless	J. Frye	136,054	Feb. 18, 1873	611	200	3	201
Railway-rail	W. W. Altar	141,979	Aug. 19, 1873	521	172	4	194
Railway-rail	H. G. Angle	137,337	Apr. 1, 1873	56	17	3	361
Railway-rail	A. B. Dean and T. C. Coleman	136,043	Feb. 18, 1873	601	198	3	200
Railway-rail	W. S. Hunter	134,749	Jan. 14, 1873	241	78	3	40
Railway-rail	A. Johnson	144,029	Oct. 28, 1873	609	202	4	458
Railway-rail	J. B. Johnston	142,701	Sept. 9, 1873	338	113	4	281
Railway-rail	M. F. McIntyre	137,463	Apr. 1, 1873	164	52	3	370
Railway-rail	G. C. Morgan	136,852	Mar. 18, 1873	458	152	3	300
Railway-rail	B. Myers	143,708	Oct. 14, 1873	291	95	4	412
Railway-rail	W. Peckham	141,515	Aug. 5, 1873	93	29	4	142
Railway-rail	M. R. Perkins	144,221	Nov. 4, 1873	45	13	4	482
Railway-rail	R. Steel	142,179	Aug. 26, 1873	718	237	4	220
Railway-rail	J. H. Wales and H. S. Cushman	142,182	Aug. 26, 1873	721	238	4	220
Railway-rail fastening	A. M. Rouse	145,015	Nov. 25, 1873	735	248	4	572
Railway-rail joint	T. V. Allis	137,587	Apr. 8, 1873	286	88	3	391
Railway-rail joint	R. Anthony and F. A. Seabert	137,819	Apr. 15, 1873	500	156	3	422
Railway-rail joint	J. Bishop	140,760	July 15, 1873	374	128	4	58
Railway-rail joint	W. R. Clark	136,307	Feb. 25, 1873	845	273	3	231
Railway-rail joint	J. M. Clem	135,082	Jan. 21, 1873	543	176	3	79
Railway-rail joint	W. Crandell	139,660	June 10, 1873	202	66	3	641
Railway-rail joint	H. Decker	142,996	Sept. 23, 1873	602	204	4	324
Railway-rail joint	W. G. Dunn	145,339	Dec. 9, 1873	275	92	4	620
Railway-rail joint	J. L. Hudson	142,020	Aug. 19, 1873	560	185	4	198
Railway-rail joint	W. D. Lindsley	142,030	Aug. 19, 1873	569	188	4	198
Railway-rail joint	M. F. McIntyre	136,530	Mar. 4, 1873	160	52	3	258
Railway-rail joint	S. Nunamaker	134,924	Jan. 14, 1873	394	125	3	52
Railway-rail joint	T. Rodes	143,533	Oct. 7, 1873	117	40	4	390
Railway-rail joint	G. W. Skaats	137,253	Mar. 25, 1873	821	270	3	340
Railway-rail joint	W. H. Skidmore	142,954	Sept. 16, 1873	561	190	4	310
Railway-rail joint	G. A. Sturges	139,276	May 27, 1873	758	239	3	590
Railway-rail joint	W. Thompson	145,372	Dec. 9, 1873	298	100	4	622
Railway-rail, Joint-connection for hollow	R. S. Sanborn	142,654	Sept. 9, 1873	299	98	4	278

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Railway-rail joints, Elastic seat for	L. Scofield, jr.	143,304	Sept. 30, 1873	861	295	4	361
Railway-rail joint-fastening	B. W. Buchheit	142,610	Sept. 9, 1873	263	86	4	275
Railway-rail joint-fastening	G. A. Sturgess	143,790	Oct. 21, 1873	382	127	4	429
Railway-rail joint-fastening	S. Vanstone	136,683	Mar. 11, 1873	305	101	3	279
Railway-rail joint-stiffener	H. Harding	145,649	Dec. 16, 1873	552	182	4	654
Railway-rail, Manner of punching bolt-hole in steel	T. Critchlow	136,037	Feb. 18, 1873	596	196	3	200
Railway-rail splice	H. P. Adams	136,402	Mar. 4, 1873	44	16	3	249
Railway-rail, Street	M. L. Ghirardini	141,217	July 29, 1873	823	269	4	111
Railway-rails, Device for straightening	T. J. Todd	135,676	Feb. 11, 1873	274	86	3	161
Railway-rails, Process of utilizing old	G. Fritz	145,166	Dec. 2, 1873	118	39	4	595
Railway safety-guard	C. Latimer	137,694	Apr. 8, 1873	378	117	3	399
Railway-signal	J. H. Johnson and J. E. Layton	140,200	June 24, 1873	711	224	3	698
Railway-signal	E. R. Marshall	144,854	Nov. 25, 1873	604	{ 205 } 206	{ 4 } 4	{ 561 } 561
Railway-signal	J. F. Ross	142,944	Sept. 16, 1873	552	187	4	309
Railway-signal	W. Wickersham	143,483	Oct. 7, 1873	70	24	4	386
Railway-signal apparatus, Electric	F. L. Pope	140,790	July 15, 1873	399	136	4	60
Railway-signal apparatus, Electric	H. W. Spang	141,395	July 29, 1873	993	322	4	124
Railway-signal, Automatic	H. S. Evans	143,815	Oct. 21, 1873	404	134	4	431
Railway-signal, Electric	{ J. D. and T. Digney, H. Lar- } tigue and H. Forest.	139,376	May 27, 1873	832	{ 266 } 267	{ 3 } 3	{ 596 } 596
Railway-signal, Electric	S. C. Hendrickson	143,694	Oct. 14, 1873	275	91	4	411
Railway-signal, Electric	D. Rousseau	141,387	July 29, 1873	985	320	4	123
Railway-signal, Electric	H. W. Spang	140,737	July 8, 1873	349	118	4	48
Railway-signal, Musical	R. A. Filkins	141,266	July 29, 1873	871	285	4	115
Railway-signal, Pneumatic	W. E. Prall	145,309	Dec. 9, 1873	248	83	4	618
Railway-signals, Circuit-breaker for electric	D. Rousseau	144,568	Nov. 11, 1873	343	115	4	517
Railway-signals, Circuit-closer for	D. Rousseau	140,953	July 15, 1873	551	185	4	72
Railway-signals, Circuit-closer for	G. H. Snow	143,935	Oct. 21, 1873	501	169	4	439
Railway-signals, Circuit for electric	F. L. Pope	140,536	July 1, 1873	166	56	4	22
Railway-signals, Electric circuit and device for	F. L. Pope	143,529	Oct. 7, 1873	111	38	4	389
Railway-signals, Track-circuit for electric	S. C. Hendrickson	143,903	Oct. 21, 1873	476	160	4	437
Railway-signaling apparatus, Circuit-closer for	H. W. Spang	142,131	Aug. 26, 1873	620	{ 223 } 224	{ 4 } 4	{ 217 } 217
Railway-signaling apparatus, Electric	R. K. Boyle	141,755	Aug. 12, 1873	313	103	4	169
Railway-signaling apparatus, Electric	F. L. Pope	145,308	Dec. 9, 1873	246	82	4	617
Railway, Street	J. R. Beckett	142,668	Sept. 9, 1873	313	104	4	279
Railway, Street	T. R. Lovett	134,906	Jan. 14, 1873	378	120	3	50
Railway-switch	J. R. Adams	138,834	May 13, 1873	338	104	3	535
Railway-switch	J. B. Alexander	144,379	Nov. 11, 1873	183	63	4	505
Railway-switch	D. J. Arnold	136,895	Mar. 18, 1873	493	163	3	303
Railway-switch	G. F. Beatty	144,014	Oct. 28, 1873	599	198	4	457
Railway-switch	G. W. Billings	137,050	Mar. 25, 1873	636	210	3	326
Railway-switch	H. Black	136,126	Feb. 25, 1873	691	{ 223 } 224	{ 3 } 3	{ 219 } 219
Railway-switch	D. E. Brockett	142,673	Sept. 9, 1873	316	105	4	279
Railway-switch	W. H. Clark and P. Chaney, jr.	142,837	Sept. 16, 1873	463	157	4	302
Railway-switch	A. W. Cram	135,527	Feb. 4, 1873	121	38	3	137
Railway-switch	H. S. Dewey	137,535	Apr. 8, 1873	241	74	3	388
Railway-switch	M. and J. W. Fels	140,909	July 15, 1873	507	171	4	69
Railway-switch	A. C. Garratt	140,770	July 15, 1873	381	131	4	59
Railway-switch	B. Hall	140,915	July 15, 1873	512	172	4	69
Railway-switch	F. P. Hanchet	140,917	July 15, 1873	514	173	4	69
Railway-switch	S. H. Jenkins	144,102	Oct. 28, 1873	670	221	4	463
Railway-switch	G. Keech	144,207	Nov. 4, 1873	34	10	4	481
Railway-switch	J. F. Linthicum	139,589	June 3, 1873	126	42	3	619
Railway-switch	E. Mercer	145,518	Dec. 16, 1873	442	144	4	645
Railway-switch	T. Newman	145,678	Dec. 16, 1873	578	189	4	656
Railway-switch	H. H. Potter	144,224	Nov. 4, 1873	47	14	4	482
Railway-switch	T. J. Reynolds	145,013	Nov. 25, 1873	733	247	4	572
Railway-switch	J. G. Rockwell	143,302	Sept. 30, 1873	860	294	4	361
Railway-switch	C. C. Shelby	139,827	June 10, 1873	362	112	3	654
Railway-switch	C. S. and L. R. Shute	136,776	Mar. 11, 1873	380	126	3	285
Railway-switch	W. A. Slingerland	144,930	Nov. 25, 1873	662	225	4	566
Railway-switch	C. D. Tisdale	139,279	May 27, 1873	759	240	3	590
Railway-switch	W. H. Van Gieson	139,635	June 3, 1873	164	55	3	622
Railway-switch	E. P. Wheeler	144,007	Oct. 28, 1873	593	196	4	457
Railway-switch	C. H. White	139,220	May 20, 1873	688	217	3	577
Railway-switch, Means for operating	J. Wood	144,880	Nov. 25, 1873	625	212	4	562
Railway-switch, Self-closing	T. K. Hubbell and G. H. Gregory	144,848	Nov. 25, 1873	599	204	4	560
Railway-switch signal	J. Cullen	139,046	May 20, 1873	522	165	3	563
Railway-switch signal	C. W. Spayd	145,456	Dec. 9, 1873	370	123	4	627
Railway-switch stand	R. A. Rash	142,725	Sept. 9, 1873	356	121	4	282
Railway-switch, Street	J. E. Pattison	140,433	July 1, 1873	75	27	4	14
Railway-tank feeder	R. J. Gibbons	140,132	June 24, 1873	654	205	3	693
Railway-tank feeder	A. Grochau	135,473	Feb. 4, 1873	74	23	3	133
Railway-tank, Self-feeding	B. D. Moody	140,294	June 24, 1873	789	250	3	704
Railway-tank, Watering-column for	J. N. Poage	145,236	Dec. 2, 1873	177	61	4	599
Railway-tie	P. S. Devlan	143,407	Oct. 7, 1873	9	3	4	381
Railway-tie	H. L. De Zeng	145,991	Dec. 30, 1873	882	286	4	703
Railway-tie	W. Peck and H. C. Richman	139,518	June 3, 1873	64	22	3	614
Railway-tie	G. R. Richardson	140,952	July 15, 1873	550	184	4	72
Railway-tie	W. H. Sterling	139,031	May 20, 1873	511	161	3	562
Railway-tie	T. R. Timby	145,258	Dec. 2, 1873	197	68	4	601
Railway-tie, Iron	C. W. Gulick	140,411	July 1, 1873	60	21	4	13
Railway time-signal	G. B. Cummings	143,405	Oct. 7, 1873	6	2, 3	4	381
Railway time-signal	J. Fend and J. W. Stevenson	145,057	Dec. 2, 1873	16	6	4	587
Railway time-signal	H. H. Ford	143,135	Sept. 23, 1873	713	245	4	333
Railway-track	L. H. Peteler	135,839	Feb. 11, 1873	418	136	3	172
Railway-track	A. D. Rock	135,667	Feb. 11, 1873	266	84	3	160
Railway-track	D. S. Tuthill	135,300	Jan. 28, 1873	752	243	3	108
Railway-track lifter	A. H. Arnot	135,747	Feb. 11, 1873	332	106	3	166
Railway-track tamper	P. Magee	136,845	Mar. 18, 1873	452	150	3	300
Railway-track wrench	P. L. Gibbs	137,910	Apr. 15, 1873	578	181	3	428
Railway-tracks, Repairing	B. A. Warfield	145,465	Dec. 9, 1873	378	125	4	628

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Railway-train indicator	S. W. Hemenway	136, 242	Feb. 25, 1873	786	254	3	227
Railway-train, Smoke and spark conduit for	T. De Cedezo	143, 812	Oct. 21, 1873	401	133	4	431
Railway-trains, Electric apparatus for signaling between	R. K. Boyle	143, 663	Oct. 14, 1873	242	81	4	409
Railway, Ventilating underground and sub-surface	O. Vandenburg	136, 563	Mar. 4, 1873	190	62, 63	3	260
Railway water-crane	H. S. Cubberley and D. Mann	142, 150	Aug. 26, 1873	695	229	4	218
Railway water-tank	J. L. Shaw	137, 388	Apr. 1, 1873	97	32	3	365
Railway water-tank, Watering-column for	J. N. Poage	139, 188	May 20, 1873	661	{ 207 208 }	{ 3 3 }	{ 574 574 }
Railway, Wheel for endless	J. Frye	136, 053	Feb. 18, 1873	610	200	3	201
Rake : <i>See</i> Harvester-rake. Hay-rake. Horse-rake. Revolving-rake.							
Rake	J. O. Jones	143, 578	Oct. 14, 1873	171	58	4	403
Rake	L. A. Powers	144, 791	Nov. 18, 1873	536	182	4	545
Rake and tedder, Combined	R. J. Colvin	138, 132	Apr. 22, 1873	784	250	3	454
Rake and tedder, Combined	C. La Dow	143, 166	Sept. 23, 1873	734	253	4	334
Rake and tedder, Combined	S. Perry	136, 539	Mar. 4, 1873	170	54	3	259
Rake-shoe, Revolving	A. J. Taylor	136, 189	Feb. 25, 1873	746	240	3	223
Range	L. Meyer	145, 674	Dec. 16, 1873	574	188	4	656
Range, Cooking	W. Hopkin, jr.	143, 762	Oct. 21, 1873	356	119	4	427
Range, Cooking	J. H. Mitchell	139, 728	June 10, 1873	272	85	3	647
Range, Cooking	J. L. Pfau, jr.	139, 187	May 20, 1873	661	207	3	574
Range, Cooking	N. M. Simonds	140, 550	July 1, 1873	177	60	4	23
Range for cooking and heating	S. Teets	138, 543	May 6, 1873	66	22	3	503
Range, Heating	J. Lawlor	140, 205	June 24, 1873	715	225	3	698
Range, Heating and cooking	H. L. Palmer	135, 356	Jan. 28, 1873	804	260	3	112
Range, Hot-water heating-apparatus for	H. L. Palmer	134, 765	Jan. 14, 1873	253	83	3	41
Rat-trap	T. Hebb	136, 995	Mar. 18, 1873	577	192	3	310
Ratchet-drill	B. Gallagher	137, 432	Apr. 1, 1873	137	45	3	368
Ratchet-drill	T. J. Sloan	142, 356	Sept. 2, 1873	30	11	4	244
Ratchet-drill	J. Swank	135, 451	Feb. 4, 1873	55	18	3	132
Ratchet-pinion	J. F. Kingwill	135, 991	Feb. 18, 1873	557	184	3	197
Ratchet-rod, Adjustable	E. H. Smith	143, 538	Oct. 7, 1873	121	41	4	390
Ratchet-wrench	L. C. Colbert	145, 399	Dec. 9, 1873	324	109	4	624
Rattan ware	S. H. Penley	144, 563	Nov. 11, 1873	338	114	4	517
Razor	E. A. Freeman	135, 793	Feb. 11, 1873	377	121	3	169
Razor-strap	J. B. Lucas	139, 011	May 20, 1873	497	156	3	561
Razor-strap	J. B. Lucas	145, 742	Dec. 23, 1873	645	211	4	674
Reading-gage	R. S. Hildreth	140, 135	June 24, 1873	657	206	3	693
Reamer, Adjustable	A. Shedlock	139, 087	May 20, 1873	566	178	3	567
Reaper, &c., Coupling-joint for	G. W. Sylvester	143, 195	Sept. 23, 1873	761	262	4	337
Reaper and mower knife, Heel for	R. Allstatter	134, 831	Jan. 14, 1873	315	100	3	45
Reaper's coupling-joint	G. W. Sylvester	138, 709	May 6, 1873	215	67	3	515
Reciprocating-engine	S. J. Jones	143, 827	Oct. 21, 1873	412	137	4	432
Reciprocating-engine	A. Staley	142, 747	Sept. 9, 1873	379	127	4	284
Reciprocating steam-engine	A. E. Baker	137, 167	Mar. 25, 1873	739	{ 245 246 }	{ 3 3 }	{ 334 334 }
Reciprocating steam-engine	R. G. Nicoll and G. H. Hollmann	139, 258	May 27, 1873	737	233	3	588
Reciprocating steam-engine	W. Simpson and A. Gardner	135, 670	Feb. 11, 1873	268	84	3	161
Reciprocating steam-engine	J. W. Wilbraham	137, 273	Mar. 25, 1873	839	275	3	341
Reciprocating steam-engine and saw-mill combined	I. Brown	139, 233	May 27, 1873	716	{ 225 226 }	{ 3 3 }	{ 586 586 }
Reclining-chair	G. Buchanan	141, 318	July 29, 1873	916	300	4	119
Reclining-chair	E. Collins	141, 121	July 22, 1873	714	238	4	95
Reclining-chair	G. D. Goss	137, 069	Mar. 25, 1873	656	{ 217 218 }	{ 3 3 }	{ 328 328 }
Reclining-chair	G. C. Paine	141, 662	Aug. 12, 1873	237	75	4	162
Reclining-chair	E. C. Ranks	143, 299	Sept. 30, 1873	857	294	4	360
Reclining-chair, Adjustable	J. J. Hartman	145, 651	Dec. 16, 1873	553	182	4	654
Reclining-chair, Adjustable	G. A. Schastey	145, 595	Dec. 16, 1873	506	166	4	650
Reclining-chair, Self	G. Niderkorn	142, 039	Aug. 19, 1873	581	191	4	199
Reel : <i>See</i> Angling-reel. Clothes-reel. Clothes-line reel. Fishing-reel. Harvester-reel. Hose-reel. Oven-reel.							
Reel	R. Simon	141, 084	July 22, 1873	683	229	4	92
Refining petroleum	S. Van Syckel	140, 801	July 15, 1873	409	139	4	61
Refining petroleum, Process of	A. Farrar	138, 237	Apr. 29, 1873	902		3	472
Reflector	J. O. Belknap	138, 843	May 13, 1873	347	107	3	536
Reflector	C. F. Jacobsen	138, 255	Apr. 29, 1873	923	291	3	474
Reflector	F. L. Senour	139, 923	June 17, 1873	456	142	3	668
Reflector	H. B. Walbridge	140, 325	June 24, 1873	820	260	3	707
Refrigerating-apparatus	J. L. Tripler	140, 321	June 24, 1873	816	{ 258 259 }	{ 3 3 }	{ 707 707 }
Refrigerating-apparatus for vessels, railway-cars, &c.	W. Bray	136, 484	Mar. 4, 1873	114	38	3	255
Refrigerator	R. Armiger	145, 081	Dec. 2, 1873	41	13	4	589
Refrigerator	J. J. Bailey	138, 364	Apr. 29, 1873	1, 019	321	3	481
Refrigerator	W. M. Baker	138, 553	May 6, 1873	78	25	3	504
Refrigerator	W. M. Baker	143, 607	Oct. 14, 1873	194	65	4	405
Refrigerator	A. Bardell	142, 191	Aug. 26, 1873	728	240	4	221
Refrigerator	C. Camp	143, 059	Sept. 23, 1873	657	225	4	328
Refrigerator	S. E. Condon	134, 644	Jan. 7, 1873	137	44	3	17
Refrigerator	B. R. Du Val	138, 488	May 6, 1873	18	6	3	499
Refrigerator	E. S. Earley	135, 209	Jan. 28, 1873	671	216	3	102
Refrigerator	A. J. and J. Fink	145, 855	Dec. 23, 1873	739	242	4	681
Refrigerator	S. M. Fort	141, 781	Aug. 12, 1873	341	112	4	171
Refrigerator	F. W. Hunt	142, 469	Sept. 2, 1873	133	43	4	253
Refrigerator	T. D. Kingan	142, 796	Sept. 16, 1873	430	145	4	299

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Refrigerator.....	J. Lorenz and H. F. W. Bender.....	145, 066	Dec. 2, 1873	24	8	4	587
Refrigerator.....	D. Mulcahy.....	138, 095	Apr. 22, 1873	757	240	3	452
Refrigerator.....	C. O. Peck.....	137, 477	Apr. 1, 1873	178	56	3	372
Refrigerator.....	J. Rohrer.....	143, 591	Oct. 14, 1873	179	61	4	404
Refrigerator.....	E. S. Root.....	145, 127	Dec. 2, 1873	83	27	4	592
Refrigerator.....	J. G. Seltzer and A. J. Fink.....	134, 937	Jan. 14, 1873	406	130	3	53
Refrigerator.....	M. Shaw.....	139, 428	May 27, 1873	888	286	3	600
Refrigerator.....	A. B. Spencer.....	135, 251	Jan. 23, 1873	715	229	3	105
Refrigerator.....	R. Taylor.....	137, 112	Mar. 25, 1873	693	230	3	330
Refrigerator.....	R. Thomson.....	145, 317	Dec. 9, 1873	257	85	4	618
Refrigerator and beer-cooler combined.....	G. Nuss.....	140, 636	July 8, 1873	267	91	4	41
Refrigerator and cooler.....	C. D. Hicks.....	143, 625	Oct. 14, 1873	210	71	4	406
Refrigerator and mode of cooling.....	J. F. Schneider.....	139, 197	May 20, 1873	671	210	3	575
Refrigerator and sideboard combined.....	G. L. Packard.....	139, 186	May 20, 1873	660	207	3	574
Refrigerator and soda-water apparatus combined.....	T. W. Johnson.....	140, 629	July 8, 1873	260	88	4	41
Refrigerator and water-cooler combined.....	J. S. Bateman.....	137, 650	Apr. 8, 1873	337	104	3	396
Refrigerator and water-cooler combined.....	H. W. B. Hervey.....	141, 141	July 22, 1873	735	243	4	96
Refrigerator-building.....	W. S. Bate.....	143, 317	Sept. 30, 1873	872	298	4	362
Refrigerator-building.....	W. M. Mixer.....	138, 427	Apr. 29, 1873	1, 077	{ 339 340 }	{ 3 3 }	486
Refrigerator buildings, &c., Floor for.....	R. A. Smith and A. Schmid.....	142, 745	Sept. 9, 1873	377	126	4	284
Refrigerator-door.....	P. A. Vogt.....	136, 629	Mar. 11, 1873	262	88	3	275
Refrigerator for preserving butter, &c.....	G. B. Rohrer.....	135, 159	Jan. 21, 1873	605	197	3	84
Refrigerator for restaurant, &c.....	W. F. Byrne.....	140, 243	June 24, 1873	745	235	3	700
Refrigerator for slaughter-houses.....	H. A. Roberts.....	145, 968	Dec. 30, 1873	864	280	4	702
Refrigerator for transporting ice-cream, &c.....	J. Moos.....	142, 806	Sept. 16, 1873	437	148	4	300
Refrigerator for transporting oysters, &c.....	J. C. Jones.....	142, 703	Sept. 9, 1873	339	114	4	281
Refuse-burner.....	W. Glue.....	145, 861	Dec. 23, 1873	744	243	4	682
Regenerator-furnace.....	H. Frank.....	135, 640	Feb. 11, 1873	241	76	3	159
Register:							
<i>See</i> Counting-register.							
Game-register.							
Grain-register.							
Hot-air register.							
Machinery-register.							
Measuring-register.							
Package-register.							
Passenger-register.							
Telegraph-register.							
Telegraph receiving-register.							
Valve-register.							
Register and indicator.....	E. P. Wheeler.....	143, 651	Oct. 14, 1873	231	78	4	408
Register and stove-pipe thimble, Combined.....	C. Hilton.....	137, 203	Mar. 25, 1873	777	256	3	337
Register-point perforating-device.....	W. Overend.....	143, 374	Sept. 30, 1873	929	314	4	366
Regulator:							
<i>See</i> Boiler-feed regulator.							
Damper-regulator.							
Draft-regulator.							
Electrical regulator.							
Feed-water regulator.							
Gas-regulator.							
Grinding-mill feed-regulator.							
Heat-regulator.							
Speed-regulator.							
Telegraph-regulator.							
Watch-regulator.							
Water-regulator.							
Windmill-regulator.							
Rein, Check.....	G. J. Townley.....	143, 860	Oct. 21, 1873	444	148	4	434
Rein, Elastic check.....	J. Nealy, jr., and T. P. Kemp.....	136, 256	Feb. 25, 1873	800	260	3	228
Rein-guide for vehicles.....	A. D. Smith.....	142, 127	Aug. 26, 1873	676	222	4	217
Rein-holder.....	J. W. Clark.....	143, 668	Oct. 14, 1873	245	83	4	409
Rein-holder.....	E. Fahrney.....	143, 409	Oct. 7, 1873	11	4	4	381
Rein-holder.....	L. Fawcett.....	145, 559	Dec. 16, 1873	478	156	4	648
Rein-holder.....	C. M. Grannis and L. M. Fitch.....	143, 140	Sept. 23, 1873	716	246	4	333
Rein retainer, Check.....	C. H. Perrin.....	141, 814	Aug. 12, 1873	370	121	4	173
Rein support and protector, Driving.....	W. N. C. Wilson.....	139, 842	June 10, 1873	374	116	3	655
Relisher and wedge cutter.....	W. J. Hoskins and A. D. Rowe.....	139, 715	June 10, 1873	258	81	3	645
Rendering apparatus, Fat, offal, &c.....	A. Broadnax.....	136, 129	Feb. 25, 1873	694	{ 224 225 }	{ 3 3 }	219
Rendering fat and deodorizing the gases, Apparatus for.....	H. S. Firman.....	136, 827	Mar. 18, 1873	438	145	3	299
Rendering fats, Steam-generator and apparatus for.....	V. D. Anderson.....	141, 746	Aug. 12, 1873	305	100	4	168
Rendering lard, Machine for cutting up fat meat for.....	J. Weber and W. C. Siefert.....	134, 717	Jan. 7, 1873	201	65	3	22
Rendering lard, treating offal, &c., Apparatus for.....	J. N. B. Bond.....	136, 208	Feb. 25, 1873	759	245	3	224
Rendering tallow, &c., Apparatus for.....	P. W. Dalton.....	136, 420	Mar. 4, 1873	57	20	3	250
Resin-box and cooler.....	A. K. Lee.....	138, 809	May 13, 1873	314	97	3	533
Resins, Bleaching.....	A. K. Lee.....	139, 402	May 27, 1873	806	277	3	598
Respirator.....	B. W. James.....	145, 874	Dec. 23, 1873	756	247	4	683
Respirator, Nasal.....	B. W. James.....	142, 477	Sept. 2, 1873	139	45	4	253
Retort furnace for separating zinc from gold, silver, &c.....	E. Balbach, jr.....	139, 449	June 3, 1873	2	1	3	609
Reverberatory furnace.....	G. Atkins.....	136, 017	Feb. 18, 1873	580	191	3	199
Reverberatory furnace.....	W. Hayland.....	138, 564	May 6, 1873	88	28	3	504
Reverberatory furnace.....	H. McDonald.....	139, 683	June 10, 1873	223	72	3	643
Reverberatory-furnace.....	J. Morrison.....	141, 371	July 29, 1873	971	315	4	122
Revolving rake.....	A. B. Sharp.....	137, 247	Mar. 25, 1873	816	268	3	340
Revolving seat.....	G. F. Dawson.....	140, 895	July 15, 1873	491	166	4	67
Ribbon-block.....	T. Ehrenberg.....	144, 520	Nov. 11, 1873	300	101	4	514
Ribbon-block.....	W. Obrist.....	139, 326	May 27, 1873	795	253	3	593
Ribbon-case.....	J. K. Landis.....	140, 510	July 1, 1873	144	49	4	20
Rice-cleaner.....	J. L. Arms.....	141, 194	July 29, 1873	797	261	4	109
Rice-cleaner.....	D. L. Geer.....	142, 158	Aug. 26, 1873	703	232	4	219
Rice-cleaning machine.....	J. N. White.....	136, 117	Feb. 18, 1873	667	218	3	205
Rice-huller.....	M. E. Stacy.....	136, 942	Mar. 18, 1873	532	176	3	306

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Rice-hulling machine	H. B. Stevens	145, 693	Dec. 16, 1873	589	193	4	657
Rice-separating machine	H. B. Stevens	144, 803	Nov. 18, 1873	546	186	4	545
Rick-cover, Portable	J. W. Fitzgerald	140, 127	June 24, 1873	648	204	3	692
Rifle, Scythe	W. H. Daniels	137, 763	Apr. 15, 1873	452	141	3	418
Rigging-stopper	T. G. Bell	145, 833	Dec. 23, 1873	718	236	4	680
Rigging, Thimble for ship's	T. G. Bell	139, 230	May 27, 1873	714	225	3	586
Ring:							
<i>See</i> Finger-ring.							
Halter-ring.							
India-rubber ring.							
Key-ring.							
Scarf-ring.							
Spinning-ring.							
Suspension-ring.							
Ripper and rag-looper	H. M. Johnson	136, 065	Feb. 18, 1873	622	204	3	202
River, Device for sand-bars in	A. Garnham	139, 569	June 3, 1873	108	36	3	618
River, Mode of utilizing currents of	E. Valade	134, 618	Jan. 7, 1873	109	36	3	16
Rivet-heading machine	J. A. Wells	143, 549	Oct. 7, 1873	137	45	4	391
Rivet-setting machine	M. D. Brooks	142, 434	Sept. 2, 1873	97	32	4	250
Rivets, Manufacture of hollow	M. Bray	140, 881	July 15, 1873	477	161	4	66
Riveting-machine	W. Seller	136, 100	Feb. 18, 1873	651	213	3	204
Road, Construction of	E. Chadwick	141, 995	Aug. 19, 1873	535	177	4	196
Road-roller	A. Lindelof	135, 825	Feb. 11, 1873	408	132	3	171
Road-steamer, Wheel for	J. S. Fisher	137, 065	Mar. 25, 1873	651	216	3	327
Road-trimmer	B. Goodrich	144, 532	Nov. 11, 1873	311	105	4	515
Rock and ore crusher	C. Foster	138, 240	Apr. 29, 1873	904	285	3	472
Rock-drill	D. Kennedy	143, 355	Sept. 30, 1873	910	309	4	365
Rock-drill	G. E. Nutting and J. C. Githens	140, 637	July 8, 1873	268	91	4	41
Rock-drill	W. Roberts, jr.	145, 364	Dec. 9, 1873	293	98	4	621
Rock-drill	H. C. Sergeant	140, 596	July 8, 1873	232	78, 79	4	39
Rock-drill	W. Weaver	142, 824	Sept. 16, 1873	452	153	4	301
Rock-drill	S. H. Yerden	142, 319	Aug. 26, 1873	833	276	4	229
Rock-drill carriage	A. P. Thomas and W. J. Evans	140, 173	June 24, 1873	689	216	3	696
Rock-drill for shaft-boring apparatus, Expanding	G. E. Towne and W. W. Bailey	138, 959	May 13, 1873	439	138	3	544
Rock-drill rod, Safety-clamp for	H. Sontag	134, 943	Jan. 14, 1873	410	131	3	53
Rock-drills and other tools, Die for forming	M. C. Bullock	136, 812	Mar. 18, 1873	426	141	3	298
Rock-drills, Feeding-mechanism for	D. Minthorn	145, 519	Dec. 16, 1873	443	145	4	645
Rock-drills, Guide and core-barrel for revolving	J. Doty	140, 767	July 15, 1873	380	131	4	59
Rock-drills, Guide for rotary	G. Frisbee	140, 357	July 1, 1873	20	7	4	9
Rock-drills, Hydraulic feed for revolving	A. Ball	134, 506	Jan. 7, 1873	3	1	3	8
Rock-drilling machine	R. Allison	145, 775	Dec. 23, 1873	674	220	4	676
Rock-drilling machine	F. Johnson	137, 372	Apr. 1, 1873	84	27	3	364
Rock-drilling machine	C. Lohmes	137, 010	Mar. 18, 1873	591	196	3	311
Rock-drilling machine	F. Walts	134, 951	Jan. 14, 1873	418	133	3	53
Rock-drilling machine	D. Wood	138, 777	May 13, 1873	287	89	3	531
Rocking-chair	G. E. Lord	134, 688	Jan. 7, 1873	179	58	3	21
Rocking-chair	W. Mohr	136, 086	Feb. 18, 1873	640	209	3	203
Rocking-chair, Folding	A. Russell	136, 099	Feb. 18, 1873	651	213	3	204
Rocking-chair, Spring	F. Chichester	142, 145	Aug. 26, 1873	692	227	4	218
Rocking-chair, Spring	A. H. Ordway	138, 757	May 13, 1873	270	84	3	529
Rocking-horse and swing combined	B. P. Crandall, jr., and W. Twiddy	136, 707	Mar. 11, 1873	323	107	3	280
Rod:							
<i>See</i> Connecting-rod.							
Eccentric-rod.							
Fishing-rod.							
Lightning-rod.							
Piston-rod.							
Pitman-rod.							
Ratchet-rod.							
Screw-rod.							
Skipping-rod.							
Rods, Device for reducing and screw-threading	R. F. Fowler	141, 342	July 29, 1873	944	307	4	120
Roll, Casting chilled	G. G. Lobdell	139, 798	June 10, 1873	336	104	3	651
Roll for rolling railway-rails	J. W. Cooper	136, 816	Mar. 18, 1873	430	142	3	298
Roller:							
<i>See</i> Clothes-wringer roller.							
Curtain-roller.							
Land-roller.							
Leather-creasing roller.							
Puddler's ball-roller.							
Road-roller.							
Sand-paper roller.							
Roller and irrigator, Combined	D. S. Howard	140, 043	June 17, 1873	554	175	3	677
Roller and planter combined	O. Knudson	141, 144	July 22, 1873	738	244	4	96
Rolling-mill	J. E. Atwood	138, 114	Apr. 22, 1873	770	245	3	453
Rolling-mill	H. R. Hinkley	139, 246	May 27, 1873	728	230	3	587
Rolling-mill	J. Moore, W. George, and A. L. Holley	145, 225	Dec. 2, 1873	168	57, 58	4	599
Rolling-mill	C. H. Perkins	144, 631	Nov. 18, 1873	402	135	4	534
Rolling-mill	W. and G. H. Sellers	145, 129	Dec. 2, 1873	85	28	4	592
Rolling-mill	W. H. Stevens and G. B. F. Cooper	142, 052	Aug. 19, 1873	595	196	4	200
Rolling-mill	A. Wood, jr.	142, 316	Aug. 26, 1873	830	275	4	229
Rolling-mill guide	C. H. Perkins	144, 632	Nov. 18, 1873	403	135	4	534
Rolling-mill guide	C. H. Perkins	144, 633	Nov. 18, 1873	404	136	4	534
Rolling-mill, Sheet-metal	E. H. Davies	141, 701	Aug. 12, 1873	268	87	4	165
Roof, Composition dressing for	H. O. Brown	139, 864	June 17, 1873	401	.....	3	664
Roof-covering	R. U. Piper	134, 702	Jan. 7, 1873	191	62	3	22
Roof, Fire and water proof	J. Long	143, 581	Oct. 14, 1873	172	58	4	403
Roof, Fire-proof	J. B. Cornell	139, 945	June 17, 1873	472	148	3	670
Roof, Fire-proof	G. H. Johnson and W. J. Fryer, jr.	143, 352	Sept. 30, 1873	907	309	4	364
Roof, Fire-proof	N. Poulson	139, 607	June 3, 1873	141	46	3	620
Roof, Fire-proof	E. S. Tobey	137, 038	Mar. 18, 1873	615	{ 203 } { 204 }	3	313
Roof, Fire-proof mansard	W. J. Fryer, jr., and G. H. Johnson	141, 215	July 29, 1873	822	269	4	111

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Roof, Metallic	I. S. Mettler	142,641	Sept. 9, 1873	287	94	4	277
Roof-truss	P. L. Weimer	146,114	Dec. 30, 1873	993	320	4	712
Roof-truss, Iron	A. Gottlieb	140,772	July 15, 1873	383	132	4	59
Roofs, Attaching slates to	D. Ryan	145,529	Dec. 16, 1873	454	149	4	646
Roofs, &c., Fire-proof compound for coating	R. U. Piper	135,152	Jan. 21, 1873	601	.....	3	83
Roofs, &c., Fire-proof paper for	R. U. Piper	135,153	Jan. 21, 1873	601	.....	3	83
Roofing	J. H. Hood	136,516	Mar. 4, 1873	145	47	3	257
Roofing-cement, Fire-proof	J. B. Slichter	142,130	Aug. 26, 1873	679	.....	4	217
Roofing, Cement for slate	H. Wheeler	145,705	Dec. 16, 1873	603	197	4	658
Roofing, Cemented slate	A. G. Hennion	141,437	Aug. 5, 1873	24	.....	4	137
Roofing, Composite	S. C. Hogue	136,722	Mar. 11, 1873	337	.....	3	281
Roofing, Composite	R. S. Jennings	143,697	Oct. 14, 1873	277	92	4	411
Roofing, Composite	R. Lehdorff	136,840	Mar. 18, 1873	447	.....	3	300
Roofing, Composition	W. H. Haight and T. S. Gladding	140,366	July 1, 1873	26	.....	4	10
Roofing, Composition	C. Mueller	140,945	July 15, 1873	544	.....	4	72
Roofing, Felt	E. Churchill	144,016	Oct. 28, 1873	600	.....	4	457
Roofing, Fire-proof	C. Parker	138,813	May 13, 1873	319	98	3	534
Roofing, Fire-proof and water-proof	E. R. Percy	137,566	Apr. 8, 1873	267	.....	3	390
Roofing, Illuminating	T. Hyatt	142,472	Sept. 2, 1873	136	44	4	253
Roofing, Illuminating	T. Hyatt	142,473	Sept. 2, 1873	136	44	4	253
Roofing, Metallic	C. Lewando	140,928	July 15, 1873	528	176	4	70
Roofing, Metallic	P. Wall	140,100	June 17, 1873	606	191	3	681
Roofing-plate, Ventilating illuminating	T. Hyatt	145,186	Dec. 2, 1873	137	45	4	596
Roofing, Sheet-metal	E. C. Hegeler and F. W. Mat- thiessen	141,929	Aug. 19, 1873	483	160	4	191
Roofing, Sheet-metal	G. F. Leonard	140,582	July 8, 1873	219	73, 74	4	37
Roofing, Sheet-metal	R. A. Smith	143,471	Oct. 7, 1873	61	21	4	386
Roofing-slate, Mode of attaching	S. Farquhar	138,999	May 20, 1873	486	154	3	560
Roofing, Tile	D. Swain	142,056	Aug. 19, 1873	599	197	4	200
Roofing, Water-proof plastic cement for	G. Howland	138,159	Apr. 22, 1873	807	.....	3	456
Rope and cordage, Coating and preserving	W. A. Torrey	135,865	Feb. 11, 1873	437	.....	3	173
Rope-clamp	W. H. Downing	141,706	Aug. 12, 1873	273	89	4	165
Rope-clamp, Metallic	A. Méhu	141,579	Aug. 5, 1873	145	47	4	147
Rope-skipper, Automatic	J. Hoffman	140,503	July 1, 1873	138	47	4	19
Rotary cutter	C. H. Mellor and M. L. Orum	140,938	July 15, 1873	539	179	4	71
Rotary cutter, Reversible	E. V. O'Neill	139,417	May 27, 1873	879	282	3	600
Rotary engine	S. Baker and S. C. McIntire	144,882	Nov. 25, 1873	626	212	4	563
Rotary engine	J. E. Crisp	142,559	Sept. 9, 1873	220	72	4	272
Rotary engine	J. C. Culver	135,207	Jan. 28, 1873	669	216	3	102
Rotary engine	G. W. Cummings	141,261	July 29, 1873	864	282	4	114
Rotary engine	W. P. Eayrs	136,981	Mar. 18, 1873	563	{ 187 188 }	3	309
Rotary engine	W. P. Eayrs	141,128	July 22, 1873	721	240	4	95
Rotary engine	M. Elsaesser	138,744	May 13, 1873	259	80	3	528
Rotary engine	F. J. Hollenweger	142,629	Sept. 9, 1873	277	91	4	276
Rotary engine	C. C. Klein	145,505	Dec. 16, 1873	425	{ 139 140 }	4	644
Rotary engine	W. R. Manley	146,010	Dec. 30, 1873	899	{ 291 292 }	4	704
Rotary engine	W. P. Maxson	145,671	Dec. 16, 1873	572	188	4	656
Rotary engine	E. Myers	144,559	Nov. 11, 1873	335	113	4	517
Rotary engine	S. P. Ochiltree	139,807	June 10, 1873	346	107	3	652
Rotary engine	J. C. Spencer	143,936	Oct. 21, 1873	503	169	4	439
Rotary engine	L. H. Woods	144,941	Nov. 25, 1873	671	227	4	567
Rotary engine	P. Worrall	144,722	Nov. 18, 1873	477	162	4	540
Rotary engine or pump	L. Chapman	137,056	Mar. 25, 1873	640	{ 212 213 }	3	327
Rotary meter	I. Cook	141,325	July 29, 1873	921	301	4	119
Rotary shears for metal	M. Stevens	144,155	Oct. 28, 1873	712	237	4	467
Rotary steam-engine	J. V. Beekman	142,982	Sept. 23, 1873	591	201	4	323
Rotary steam-engine	J. B. Bennett	135,311	Jan. 28, 1873	760	245	3	109
Rotary steam-engine	W. Cram	138,864	May 13, 1873	364	113	3	537
Rotary steam-engine	J. F. Early	135,789	Feb. 11, 1873	374	120	3	169
Rotary steam-engine	S. B. Frank	143,504	Oct. 7, 1873	89	31	4	388
Rotary steam-engine	S. Gibson	141,710	Aug. 12, 1873	275	90	4	165
Rotary steam-engine	C. Grotz	140,914	July 15, 1873	511	172	4	69
Rotary steam-engine	D. D. Hardy	141,436	Aug. 5, 1873	23	8	4	137
Rotary steam-engine	C. Inman	136,164	Feb. 25, 1873	726	234	3	222
Rotary steam-engine	E. W. and S. Jenkins	141,226	July 29, 1873	831	271	4	111
Rotary steam-engine	J. Leaver and J. Wock	140,378	July 1, 1873	37	12	4	11
Rotary steam-engine	J. Lucas	138,334	Apr. 29, 1873	995	313	3	479
Rotary steam-engine	W. F. Moody	145,304	Dec. 9, 1873	243	81	4	617
Rotary steam-engine	L. Parker	137,795	Apr. 15, 1873	479	150	3	420
Rotary steam-engine	L. M. Shaw and A. S. Baker	143,723	Oct. 14, 1873	305	100	4	413
Rotary steam-engine	W. C. Stiles	137,109	Mar. 25, 1873	690	229	3	330
Rotary steam-engine	W. C. Stiles	138,352	Apr. 29, 1873	1,010	318	3	481
Rotary steam-engine	H. Taylor	137,261	Mar. 25, 1873	828	272	3	341
Rotary steam-engine, Reversible	O. Adams	141,909	Aug. 19, 1873	469	153	4	190
Row-lock	T. Fearson	138,388	Apr. 29, 1873	1,038	327	3	483
Row-lock	J. M. K. Southwick	134,821	Jan. 14, 1873	307	98	3	45
Row-lock	G. C. Wilen	138,972	May 13, 1873	449	141	3	545
Rubber and plumbago compound for bearings and other purposes	T. J. Mayall	140,208	June 24, 1873	716	.....	3	698
Rubber for making brush-backs, &c., Manufacture and vulcanization of	E. A. Hill	142,911	Sept. 16, 1873	522	{ 177 178 }	4	307
Rubber mat for pitchers, &c	C. A. Price	145,815	Dec. 23, 1873	705	232	4	679
Rubber sheets into strips, Machine for cutting	T. J. Mayall	140,933	July 15, 1873	531	177	4	71
Ruche-holder	J. V. Rockwell	139,423	May 27, 1873	885	285	3	600
Ruches, Setting and sewing	M. and S. Roggenburger	135,445	Feb. 4, 1873	50	16, 17	3	131
Rudder for vessels	J. W. Van Sant	138,962	May 13, 1873	442	139	3	544
Rudder, Vessel	J. B. Baptista	142,367	Sept. 2, 1873	41	14	4	245
Rudder, Vessel	O. P. Tharp	135,385	Jan. 28, 1873	832	268	3	114
Rule, Extension	E. D. Waterbury	144,003	Oct. 28, 1873	588	195	4	456

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Rule for printers, Perforating	C. W. Ames	145,380	Dec. 9, 1873	305	103	4	622
Rule, square, and bevel combined	C. M. Heffron	138,152	Apr. 22, 1873	800	255	3	456
Ruler	F. A. Combes	145,555	Dec. 16, 1873	475	155	4	648
Ruler	J. G. Ernst	140,125	June 24, 1873	647	203	3	692
Ruler and blotter combined	R. M. Austin	140,989	July 22, 1873	600	203	4	85
Ruler and blotter, Combined	T. Merrill	145,068	Dec. 2, 1873	26	9	4	587
Ruler and pencil-sharpener, Combined	W. H. Flanigan	136,230	Feb. 25, 1873	776	250	3	226
Ruler, Parallel	G. Blunck	141,029	July 22, 1873	634	214	4	88
Ruler, Parallel	W. B. Mason	134,814	Jan. 14, 1873	298	96	3	44
Ruling-gage, Draftsman's	A. F. Nagle	139,601	June 3, 1873	136	45	3	620
Ruling-machine, Paper	E. D. Averell	135,751	Feb. 11, 1873	337	108	3	166
Ruling-machine, Paper	H. T. Cliff and J. E. Martin	144,064	Oct. 28, 1873	640	210	4	461
Ruling-machine, Striker for paper	J. D. Connolly	143,672	Oct. 14, 1873	248	83	4	409
Ruling-machine, Paper	A. Hathaway	134,883	Jan. 14, 1873	358	114	3	49
S.							
Saccharine liquid, Apparatus for treating	C. W. Durant	135,788	Feb. 11, 1873	373	119	3	168
Saccharine matter from cane, Apparatus for extracting	M. S. Bringier	141,316	July 29, 1873	913	299	4	118
Saccharine matter from sugar-cane, Apparatus and process for extracting	M. S. Bringier	140,461	July 1, 1873	99	34	4	16
Sacks, Apparatus for raising, emptying, and filling	S. Wilkerson, jr.	146,117	Dec. 30, 1873	995	321	4	712
Saddle	T. H. McGrath	145,001	Nov. 25, 1873	723	244	4	571
Saddle, Riding	R. C. Hamil	139,668	June 10, 1873	210	68	3	642
Saddle-tree	P. Becker	135,755	Feb. 11, 1873	341	109	3	166
Saddle-tree	O. V. Flora	145,639	Dec. 16, 1873	545	179	4	653
Saddle-tree	A. Teas	144,164	Oct. 28, 1873	721	241	4	467
Saddle-tree, Gig	J. Bauer	136,205	Feb. 25, 1873	757	244	3	224
Sad and embossing iron, Combined	F. Myers	136,613	Mar. 11, 1873	244	83	3	274
Sad and fluting iron	J. Hewitt	135,116	Jan. 21, 1873	568	185	3	81
Sad and fluting iron	J. Hewitt	137,445	Apr. 1, 1873	148	48	3	369
Sad and fluting iron	L. Mooney	145,676	Dec. 16, 1873	575	189	4	656
Sad and fluting iron	D. W. Young, J. Hewitt, and L. Mooney	136,121	Feb. 18, 1873	670	219	3	205
Sad, fluting, and band iron	A. S. Mann	139,590	June 3, 1873	127	42	3	619
Sad-iron	W. P. Dodson	140,483	July 1, 1873	118	40	4	18
Sad-iron	J. T. Fewkes	135,791	Feb. 11, 1873	375	120	3	169
Sad-iron	S. S. Fitch	136,829	Mar. 18, 1873	440	146	3	299
Sad-iron	W. A. Freeman, jr.	135,328	Jan. 28, 1873	779	252	3	110
Sad-iron	J. Hewitt	137,201	Mar. 25, 1873	776	256	3	337
Sad-iron	W. L. Hubbell	137,205	Mar. 25, 1873	779	257	3	337
Sad-iron	W. L. Hubbell	141,054	July 22, 1873	653	220	4	90
Sad-iron	B. Jones	143,451	Oct. 7, 1873	46	16	4	384
Sad-iron	G. W. C. Lovell	136,526	Mar. 4, 1873	156	50	3	258
Sad-iron	F. Myers	136,612	Mar. 11, 1873	244	82	3	274
Sad-iron	J. J. Vaughn and C. J. Blaney	137,982	Apr. 15, 1873	636	200	3	433
Sad-iron and crimping-shoe	J. Hewitt	134,887	Jan. 14, 1873	362	115	3	49
Sad-iron crimper	J. Hewitt	135,550	Feb. 4, 1873	146	46	3	139
Sad-iron heating-case	G. W. C. Lovell	136,077	Feb. 18, 1873	632	207	3	203
Sad-iron holder and lid-lifter	C. B. Pettengill	139,733	June 10, 1873	277	86	3	647
Sad-iron shield	J. Gleason	142,334	Sept. 2, 1873	11	4	4	243
Sad-irons, &c., Mode of, and apparatus for, varnishing	W. J. Reagan	142,728	Sept. 9, 1873	361	122	4	283
Safe and vault	J. Crump	146,047	Dec. 30, 1873	931	301	4	707
Safe and vault	J. Crump	146,048	Dec. 30, 1873	933	301	4	707
Safe, Automatic fire-escape for	J. Parke	142,174	Aug. 26, 1873	714	236	4	220
Safe, Bleaching	C. W. Shively	134,941	Jan. 14, 1873	409	131	3	53
Safe, Burglar-proof	W. Corliss	137,061	Mar. 25, 1873	646	214	3	327
Safe-door, &c., Bolt for	W. Hall	141,874	Aug. 19, 1873	439	143 144	4	188
Safe-door, Bolt-work for	H. B. Tripp	142,300	Aug. 26, 1873	818	270 271	4	228
Safe-door, Device for operating	H. B. Tripp	145,032	Nov. 25, 1873	751	254	4	573
Safe-door, Securing lock-spindle in	R. Young	136,353	Feb. 25, 1873	888	286	3	235
Safe, Fire and burglar proof	B. Howard	139,792	June 10, 1873	331	103	3	651
Safe, Fire-proof	N. Constable	139,296	May 27, 1873	773	245	3	591
Safe, Fire-proof	T. Hyatt	142,476	Sept. 2, 1873	138	45	4	253
Safe, Fire-proof	J. E. Mulford	139,414	May 27, 1873	876	281	3	599
Safe, Fire-proof	D. O. Paige	141,376	July 29, 1873	975	317	4	123
Safe, Fire-proof	F. A. R. Sontag and W. H. Lotz	145,761	Dec. 23, 1873	663	216	4	675
Safe, Fire-proof	J. W. Warner	134,574	Jan. 7, 1873	69	21	3	12
Safe, Marine	G. F. Abraham	138,832	May 13, 1873	336	104	3	535
Sail and marine drag, Combined	T. M. Fleetwood	137,190	Mar. 25, 1873	764	252	3	336
Sail-bank	J. G. Young, jr.	135,055	Jan. 21, 1873	525	170	3	77
Sail, Lizard for	C. H. Gallagher	136,988	Mar. 18, 1873	570	190	3	309
Sail, Rotary	J. E. Garcia	135,641	Feb. 11, 1873	242	76	3	159
Sails, Reefing fore and aft	L. Norden	141,811	Aug. 12, 1873	368	121	4	173
Sail-stay, Ship's	C. Freeman	143,568	Oct. 14, 1873	160	54	4	402
Salt and pepper dredge combined	T. B. Atterbury	143,591	Oct. 28, 1873	539	179	4	452
Salt in cruet, Device for agitating	F. B. Richardson	136,386	Mar. 4, 1873	31	11	3	248
Salt, &c., Steam-superheater for evaporating	L. R. Cornell	142,440	Sept. 2, 1873	103	34	4	251
Salve	G. Hall	139,954	June 17, 1873	478	158	3	670
Salve	D. J. McEvoy	144,405	Nov. 11, 1873	205	68	4	506
Salver	A. H. Baggs	145,145	Dec. 2, 1873	99	33	4	593
Sample-case, Grocer's	N. B. McCreary	134,912	Jan. 14, 1873	384	122	3	51
Sample-case, Revolving	J. F. Randolph	144,924	Nov. 25, 1873	658	223	4	566
Sample-fastener	C. Mason	136,662	Mar. 11, 1873	287	96	3	277
Sand-paperying machine	D. A. and S. T. Armstrong	141,413	Aug. 5, 1873	2	1	4	135
Sand-paperying machine	H. L. Hapgood	142,626	Sept. 9, 1873	275	90	4	276
Sand-paper roller	H. W. Brett	145,392	Dec. 9, 1873	317	106	4	623
Saponifying-apparatus	G. W. Hatfield	140,701	July 8, 1873	320	108	4	46
Sap-protector	H. C. Cole and E. D. Sabin	140,185	June 24, 1873	700	220	3	696
Sap-spout	H. B. Sevey	144,871	Nov. 25, 1873	619	210	4	562
Sash and door clamp	R. L. Greenlee	143,236	Sept. 30, 1873	802	276	4	356
Sash and door clamp	T. S. Uril	139,281	May 27, 1873	762	241	3	590

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Sash and door fastener	J. B. Frost	140,026	June 17, 1873	537	170	3	675
Sash and frame, Window	D. McKay	140,783	July 15, 1873	392	135	4	60
Sash, &c., Automatic fastening for	J. Holley	143,982	Oct. 28, 1873	567	188	4	455
Sash-balance	J. J. Cowell	136,366	Mar. 4, 1873	12	4	3	246
Sash-balance	R. Faries	145,289	Dec. 9, 1873	230	78	4	616
Sash-balance	C. Harbaugh	145,173	Dec. 2, 1873	126	41	4	595
Sash-balance	B. F. Hartman	135,221	Jan. 28, 1873	682	220	3	103
Sash-balance	G. H. Joss	141,356	July 29, 1873	958	312	4	122
Sash-balance	J. M. Simpson	136,461	Mar. 4, 1873	90	31	3	253
Sash-balance	L. S. Wright	142,604	Sept. 9, 1873	259	85	4	275
Sash-cord fastener	H. Harris and F. Hewitt	141,050	July 22, 1873	651	219	4	89
Sash-cord guide	C. B. Clark	140,887	July 15, 1873	483	163	4	67
Sash-cord guide	W. M. Griscom	145,863	Dec. 23, 1873	746	244	4	682
Sash-cord guide	W. Shaw	138,944	May 13, 1873	427	134	3	543
Sash-fastener	L. L. Bates	142,667	Sept. 9, 1873	312	104	4	279
Sash-fastener	R. E. Beckwith	135,963	Feb. 18, 1873	532	175	3	195
Sash-fastener	J. Bishop	135,396	Feb. 4, 1873	1	1	3	128
Sash-fastener	G. W. Bishop	137,883	Apr. 15, 1873	551	172	3	426
Sash-fastener	G. W. Bishop	142,431	Sept. 2, 1873	95	31	4	250
Sash-fastener	E. Burstow	144,655	Nov. 18, 1873	426	143	4	535
Sash-fastener	T. P. Coin	140,994	July 22, 1873	603	204	4	86
Sash-fastener	A. Cole and E. Davis	141,120	July 22, 1873	713	238	4	95
Sash-fastener	D. M. Donehoo	140,256	June 24, 1873	756	239	3	701
Sash-fastener	M. Gee	141,640	Aug. 12, 1873	217	69	4	160
Sash-fastener	O. H. Gilbert	144,451	Nov. 11, 1873	243	82	4	510
Sash-fastener	L. D. Gillette	144,528	Nov. 11, 1873	398	103	4	515
Sash-fastener	M. Judd	139,895	June 17, 1873	433	134	3	667
Sash-fastener	T. P. I. Magoun	134,813	Jan. 14, 1873	297	96	3	44
Sash-fastener	O. W. Noble	143,026	Sept. 23, 1873	626	213	4	325
Sash-fastener	A. C. Rodgers	141,385	July 29, 1873	984	319	4	123
Sash-fastener	J. D. Shewell	145,972	Dec. 30, 1873	868	281	4	702
Sash fastener and tightener	T. Frost	136,232	Feb. 25, 1873	777	251	3	226
Sash-fastener and weather-strip combined	E. J. Sprague	141,178	July 22, 1873	775	253	4	99
Sash-holder	C. C. Algeo	137,280	Apr. 1, 1873	1	1	3	357
Sash-holder	S. I. Anderson, P. Walden, and E. P. More	143,655	Oct. 14, 1873	234	79	4	408
Sash-holder	W. B. Bradford	134,727	Jan. 14, 1873	225	72	3	38
Sash-holder	S. Chard	145,988	Dec. 30, 1873	881	285	4	703
Sash-holder	F. M. Davis	142,994	Sept. 23, 1873	601	204	4	323
Sash-holder	J. L. Devol and J. M. Oakley	140,898	July 15, 1873	494	167	4	68
Sash-holder	J. F. Graham	138,494	May 6, 1873	22	8	3	499
Sash-holder	R. B. Hugunin	137,682	Apr. 8, 1873	367	114	3	398
Sash-holder	E. Knapp	138,258	Apr. 29, 1873	926	292	3	474
Sash-holder	C. Partello	135,358	Jan. 28, 1873	807	260	3	112
Sash-holder	D. Pike	134,925	Jan. 14, 1873	395	126	3	52
Sash-holder	G. W. Richardson	141,078	July 22, 1873	679	227	4	92
Sash-holder	W. Senk	139,825	June 10, 1873	361	112	3	653
Sash-holder	G. A. Sturges	141,184	July 22, 1873	781	255	4	99
Sash-holder	H. Thomas	136,681	Mar. 11, 1873	304	100	3	279
Sash-holder	L. A. Tuttle	138,057	Apr. 22, 1873	726	230	3	450
Sash-holder	J. Ware	142,305	Aug. 26, 1873	821	272	4	229
Sash-holder	E. W. Warren	134,715	Jan. 7, 1873	200	65	3	22
Sash-holder	J. R. Watson	135,184	Jan. 21, 1873	626	204	3	86
Sash-holder	T. Weaver	141,904	Aug. 19, 1873	464	151	4	190
Sash-holder, Carriage-window	S. E. Totten, jr.	136,793	Mar. 11, 1873	396	131	3	286
Sash, Hot bed	J. Taylor	136,789	Mar. 11, 1873	392	130	3	286
Sash-lifter	H. Kingsbury	141,647	Aug. 12, 1873	224	70	4	161
Sash-lock	C. T. Gibson	135,217	Jan. 28, 1873	679	219	3	102
Sash, Machine for making window	J. Travers	142,420	Sept. 2, 1873	86	28	4	249
Sash, Metallic window	F. M. Campbell	141,204	July 29, 1873	809	265	4	110
Sash, Metal window	J. D. Moran	140,588	July 8, 1873	226	76	4	38
Sash-molding	R. L. Anderton	144,307	Nov. 4, 1873	111	37	4	487
Sash-rope fastening	L. Russell	135,368	Jan. 28, 1873	817	264	3	113
Sash, Ventilating window	C. Pullinger	142,941	Sept. 16, 1873	550	186	4	309
Sash ventilator, Window	J. C. Bates	136,638	Mar. 11, 1873	269	90	3	276
Sash ventilator, Window	J. C. Bates	141,254	July 29, 1873	859	281	4	114
Sash-weight	P. Ashen	137,753	Apr. 15, 1873	442	137	3	417
Sash, Window	W. L. McDowell	138,755	May 13, 1873	269	83	3	529
Sash, Window	D. W. Noyes	138,921	May 13, 1873	408	128	3	541
Satchel, School	H. Wallis	135,254	Jan. 28, 1873	717	229	3	105
Sauce for food	A. P. Agresta and A. Meucci	142,071	Aug. 26, 1873	629	213	4	213
Sausage-cutter	J. Knopp	146,007	Dec. 30, 1873	897	291	4	704
Sausage-stuffer	P. W. Brownback	142,897	Sept. 16, 1873	512	174	4	306
Sausage-stuffer	F. Mickels	138,674	May 6, 1873	185	59	3	512
Sausage-stuffing, &c., Apparatus for	J. A. Moore	141,451	Aug. 5, 1873	38	12	4	138
Saw	S. Cook	141,036	July 22, 1873	641	216	4	89
Saw	J. Crookes	141,122	July 22, 1873	716	238	4	95
Saw	V. Luppert and P. St. Pierre	141,939	Aug. 19, 1873	491	162	4	192
Saw	E. Marx	144,344	Nov. 4, 1873	142	48	4	490
Saw	S. Scholfield	139,426	May 27, 1873	887	285	3	600
Saw-attachment	J. Giblin	140,495	July 1, 1873	130	44	4	19
Saw-backs, Machine for forming	C. Majer	142,220	Aug. 26, 1873	778	256	4	225
Saw, Band	C. A. Young	139,644	June 3, 1873	174	58	3	623
Saw bench, Circular	B. F. Dunklee	136,979	Mar. 18, 1873	562	187	3	309
Saw-blanks, Case for	C. L. Walker	139,094	May 20, 1873	572	179	3	567
Saw-buckle	C. W. Hubbard	141,225	July 29, 1873	830	271	4	111
Saw, Buckle for hanging reciprocating	H. W. Brown	139,363	May 27, 1873	822	263	3	595
Sawdust for use in the arts, Preparing	F. H. Snyder	138,821	May 13, 1873	325	103	3	534
Saw filing and setting machine	N. G. Ross	142,585	Sept. 9, 1873	243	80	4	273
Saw-filing device	A. P. Durant	137,424	Apr. 1, 1873	128	42	3	367
Saw-filing machine	W. B. Bizzell	140,399	July 1, 1873	52	18	4	12
Saw-filing machine	G. Blythe	137,172	Mar. 25, 1873	746	247	3	334
Saw-filing machine	J. J. Engleman	144,522	Nov. 11, 1873	301	101	4	514
Saw-filing machine	C. F. Henis	139,149	May 20, 1873	625	195	3	571

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Saw-filing machine	W. W. Parsons	146, 017	Dec. 30, 1873	906	293	4	705
Saw frame, Buck	W. Clemson	135, 408	Feb. 4, 1873	15	4	3	129
Saw-gage	G. W. Kirby	144, 209	Nov. 4, 1873	35	10	4	481
Saw-gage, Circular	C. J. Ulmer	138, 453	Apr. 29, 1873	1, 100	347	3	488
Saw-gage, Gang	N. C. Moody	142, 643	Sept. 9, 1873	288	95	4	277
Saw-gang, Band	H. Sillman	135, 164	Jan. 21, 1873	610	198	3	84
Saw-ginding machine	D. M. Mefford	137, 706	Apr. 8, 1873	389	{ 120 121 }	3	400
Saw-guard, Circular	O. A. Dean	141, 702	Aug. 12, 1873	269	87	4	165
Saw-guide	P. Pryibil	134, 704	Jan. 7, 1873	192	62	3	22
Saw-guide, Adjustable	F. H. Palmer	140, 157	June 24, 1873	675	212	3	694
Saw-guide, Circular	S. Taylor	140, 096	June 17, 1873	602	190	3	681
Saw-gummer	H. Baughman	135, 962	Feb. 18, 1873	531	175	3	195
Saw-gummer	W. G. Blackledge	140, 672	July 8, 1873	295	99	4	43
Saw-gummer	L. Gibbs	145, 643	Dec. 16, 1873	548	180	4	654
Saw-gummer	W. Tucker	136, 110	Feb. 18, 1873	662	216	3	205
Saw-gumming machine	H. Baughman	145, 327	Dec. 9, 1873	265	89	4	619
Saw-gumming machine	C. N. Brown	135, 769	Feb. 11, 1873	352	113	3	167
Saw-gumming machine	S. P. Olney	142, 173	Aug. 26, 1873	713	236	4	219
Saw-gumming machine	K. Weinberger	138, 354	Apr. 29, 1873	1, 011	318	3	481
Saw, Hand	T. S. Disston	143, 128	Sept. 23, 1873	708	243	4	332
Saw-handle	E. C. Atkins	139, 756	June 10, 1873	300	93	3	649
Saw-handle	M. L. Ballard	137, 402	Apr. 1, 1873	109	35	3	366
Saw-handle	W. Clemson	135, 628	Feb. 11, 1873	232	73	3	158
Saw-handle	W. Clemson	145, 628	Dec. 16, 1873	535	175	4	653
Saw-handle, Cross-cut	W. E. Travis	137, 978	Apr. 15, 1873	634	199	3	433
Saw-hanging	J. E. Merritt	142, 036	Aug. 19, 1873	578	190	4	199
Sawing and splitting machine, Wood	A. G. Hagerstrom	135, 332	Jan. 28, 1873	783	254	3	110
Sawing-machine	P. M. Andriot	141, 479	Aug. 5, 1873	62	19	4	140
Sawing-machine	J. T. Baggs	138, 552	May 6, 1873	77	25	3	504
Sawing-machine	E. Benjamin	137, 284	Apr. 1, 1873	5	2	3	357
Sawing-machine	O. W. Brock	137, 758	Apr. 15, 1873	449	139	3	418
Sawing-machine	T. H. Carroll	141, 761	Aug. 12, 1873	320	{ 104 105 }	4	169
Sawing-machine	H. A. Current	136, 216	Feb. 25, 1873	765	247	3	225
Sawing-machine	W. Detrick and J. D. Culver	139, 554	June 3, 1873	93	32	3	616
Sawing-machine	J. Eachus	142, 154	Aug. 26, 1873	699	231	4	218
Sawing-machine	E. Inman	142, 699	Sept. 9, 1873	336	113	4	281
Sawing-machine	G. Marshall	139, 965	June 17, 1873	484	153	3	671
Sawing-machine	W. Neideffer	135, 575	Feb. 4, 1873	168	54	3	141
Sawing-machine	A. T. Nichols	137, 022	Mar. 18, 1873	601	199	3	312
Sawing-machine	A. T. Nichols	141, 163	July 22, 1873	758	249	4	98
Sawing-machine	F. C. G. Parr	135, 007	Jan. 21, 1873	481	154	3	74
Sawing-machine	D. R. Pratt	146, 021	Dec. 30, 1873	909	294	4	705
Sawing-machine	G. T. Riddle	143, 033	Sept. 23, 1873	634	216	4	326
Sawing-machine	W. H. Shugart	141, 959	Aug. 19, 1873	506	167	4	193
Sawing-machine	C. H. Smith	137, 626	Apr. 8, 1873	316	98, 99	3	394
Sawing-machine	E. H. Stearns	144, 154	Oct. 28, 1873	710	237	4	466
Sawing-machine	H. M. Stow	140, 657	July 8, 1873	283	96	4	43
Sawing-machine	J. M. Stowell	142, 294	Aug. 26, 1873	813	269	4	228
Sawing-machine	J. M. Westmoreland	137, 042	Mar. 18, 1873	620	205	3	313
Sawing-machine	S. Wheeler	137, 581	Apr. 8, 1873	282	87	3	391
Sawing-machine	A. Xander	141, 975	Aug. 19, 1873	518	171	4	194
Sawing machine, Band	O. Bonney, jr.	138, 121	Apr. 22, 1873	775	247	3	454
Sawing machine, Band	J. A. Roche and G. V. Orton	144, 797	Nov. 18, 1873	542	184	4	545
Sawing machine, Band	H. Sillman	138, 443	Apr. 29, 1873	1, 091	344	3	487
Sawing machine, Band	B. D. Whitney	137, 583	Apr. 8, 1873	283	87	3	391
Sawing machine, Scroll	T. W. Dowling	145, 993	Dec. 30, 1873	884	286	4	703
Sawing machine, Scroll	M. Foley	143, 895	Oct. 21, 1873	470	158	4	437
Sawing machine, Scroll	G. S. Grigg	136, 433	Mar. 4, 1873	68	24	3	251
Sawing machine, Scroll	M. Hansen	141, 048	July 22, 1873	649	219	4	89
Sawing machine, Scroll	H. Lawrence	138, 808	May 13, 1873	313	97	3	533
Sawing machine, Scroll	E. A. Walker	142, 361	Sept. 2, 1873	35	13	4	245
Sawing-machine table	H. O. Reed	142, 813	Sept. 16, 1873	443	150	4	300
Sawing machine, Wood	B. F. Click	143, 330	Sept. 30, 1873	883	302	4	363
Sawing machine, Wood	S. Funck	135, 216	Jan. 28, 1873	678	219	3	102
Sawing machine, Wood	I. G. Ringstad	142, 121	Aug. 26, 1873	672	221	4	216
Sawing machine, Wood	J. Skinner	144, 482	Nov. 11, 1873	270	91	4	512
Saw, Jig	B. Merritt	134, 760	Jan. 14, 1873	249	81, 82	3	40
Saw, Jig	M. E. Weller	143, 650	Oct. 14, 1873	230	77	4	408
Saw-jointer	S. D. Knight	144, 111	Oct. 28, 1873	677	224	4	464
Saw, Method of adjusting circular	S. W. Clemmens	139, 544	June 3, 1873	84	29	3	616
Saw-mill	B. Berndt	141, 028	July 22, 1873	634	213	4	88
Saw-mill	W. Gowen	134, 795	Jan. 14, 1873	280	91	3	43
Saw-mill	D. C. Prescott	136, 541	Mar. 4, 1873	173	55	3	259
Saw-mill carriage	B. F. and J. B. Smith	138, 206	Apr. 22, 1873	852	270	3	460
Saw mill, Circular	M. Blackburn	140, 002	June 17, 1873	515	163	3	673
Saw mill, Circular	W. A. Campbell	134, 976	Jan. 21, 1873	451	144	3	72
Saw mill, Circular	E. H. Stearns	141, 672	Aug. 12, 1873	245	78	4	163
Saw-mill crank	A. Rodgers	142, 816	Sept. 16, 1873	445	150	4	300
Saw-mill dog	H. D. Dunn	134, 653	Jan. 7, 1873	144	46	3	18
Saw-mill dog	E. H. Stearns	145, 026	Nov. 25, 1873	746	252	4	573
Saw-mill dog	J. Torrent	145, 031	Nov. 25, 1873	750	253	4	573
Saw mill, Dog for circular	J. Taber	140, 442	July 1, 1873	83	29	4	15
Saw-mill head-block	G. B. Getty	140, 032	June 17, 1873	541	171	3	676
Saw-mill head-block	D. Lane	136, 656	Mar. 11, 1873	281	94	3	277
Saw-mill head-block	D. Lane	136, 657	Mar. 11, 1873	282	95	3	277
Saw-mill head-block	G. A. Prescott and J. Barsaloux	144, 866	Nov. 25, 1873	615	209	4	562
Saw-mill head-block	A. Rodgers	139, 264	May 27, 1873	743	{ 235 236 199 }	3	588
Saw-mill head-block	G. Zschech	145, 712	Dec. 16, 1873	608	{ 198 199 }	4	659
Saw-mill pitman-lubricator	J. McKenzie	140, 152	June 24, 1873	671	210	3	694
Saw-mill slab and sliding holder	J. Barsaloux and G. A. Prescott	135, 508	Feb. 4, 1873	103	33	3	136
Saw, Scroll	J. Atkinson	144, 181	Nov. 4, 1873	5	2	4	479

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				Spec.	Dr. g.	Vol.	Page.
Saw, Scroll.	H. L. Beach	145,084	Dec. 2, 1873	43	13	4	589
Saw, Scroll.	H. Bickford	136,207	Feb. 25, 1873	758	245	3	224
Saw, Scroll.	W. H. Doane	134,650	Jan. 7, 1873	142	45	3	18
Saw, Scroll.	W. H. Doane and W. H. Dobson	135,099	Jan. 21, 1873	554	181	3	80
Saw, Scroll.	F. H. Hardenbergh	134,882	Jan. 14, 1873	357	114	3	49
Saw, Scroll.	J. W. Rowlingson	141,080	July 22, 1873	680	228	4	92
Saw, Scroll.	H. B. Smith	138,103	Apr. 22, 1873	762	242	3	453
Saw, Scroll.	E. A. Walker	139,284	May 27, 1873	764	242	3	590
Saw, Scroll.	J. B. Wright	146,118	Dec. 30, 1873	998	322	4	712
Saw-set.	J. Begbie	137,756	Apr. 15, 1873	444	138	3	417
Saw-set.	A. and W. Boynton	137,410	Apr. 1, 1873	116	38	3	366
Saw-set.	W. J. Boynton	144,947	Nov. 25, 1873	677	229	4	567
Saw-set.	J. N. Briggs	145,087	Dec. 2, 1873	47	14	4	589
Saw-set.	B. S. Castle	143,272	Sept. 30, 1873	833	286	4	359
Saw-set.	R. F. Cook	145,724	Dec. 23, 1873	629	206	4	672
Saw-set.	C. E. Grandy	137,607	Apr. 8, 1873	303	94	3	393
Saw-set.	T. E. Grimes	143,447	Oct. 7, 1873	43	15	4	384
Saw-set.	H. C. Hart	144,092	Oct. 28, 1873	662	218	4	463
Saw-set.	J. W. Leslie	136,440	Mar. 4, 1873	75	26	3	251
Saw-set.	A. B. Smith and S. Osborne	136,777	Mar. 11, 1873	382	126	3	285
Saw-set.	G. Swenson	140,441	July 1, 1873	81	29	4	15
Saw-set.	J. G. Tattershall	138,297	Apr. 29, 1873	966	303	3	477
Saw-set.	M. E. True	143,598	Oct. 14, 1873	185	63	4	404
Saw-set.	W. Tunstill	135,867	Feb. 11, 1873	439	143	3	173
Saw-setting device.	J. B. Schmid	137,150	Mar. 25, 1873	723	240	3	333
Saw-setting machine.	J. G. Baker	135,752	Feb. 11, 1873	339	108	3	166
Saw-setting machine.	W. H. Dobson	139,124	May 20, 1873	601	189	3	569
Saw-sharpening device.	J. B. Drake	143,067	Sept. 23, 1873	663	227	4	328
Saw-sharpening device.	C. Willard	137,644	Apr. 8, 1873	332	103	3	395
Saw sharpening and setting machine.	E. Duffy	139,304	May 27, 1873	781	248	3	591
Saw-sharpening machine.	T. M. Chapman	144,383	Nov. 11, 1873	187	64	4	505
Saw-sharpening machine.	T. L. Davidson and H. Winningham.	138,137	Apr. 22, 1873	788	252	3	455
Saw-sharpening machine.	F. E. Frey	139,139	May 20, 1873	615	192	3	571
Saw-sharpening machine.	E. W. Phelps	143,712	Oct. 14, 1873	294	96	4	412
Saw-straightening machine.	J. S. Anderson	135,059	Jan. 21, 1873	528	171	3	78
Saw-swage.	J. E. Emerson	142,779	Sept. 16, 1873	418	141	4	298
Saw-swage.	W. Ferguson	137,767	Apr. 15, 1873	455	142	3	418
Saw-swage.	A. J. McCollum and G. D. Emery	141,572	Aug. 5, 1873	140	45	4	147
Saw-swaging device.	C. F. Henis	134,666	Jan. 7, 1873	159	52	3	19
Saw-swaging machine.	C. F. Henis	134,667	Jan. 7, 1873	160	53	3	19
Saw-swaging machine.	G. A. Prescott	135,361	Jan. 28, 1873	810	261	3	112
Saw table, Circular.	H. C. Rosin	142,733	Sept. 9, 1873	365	123	4	283
Saw-teeth.	J. E. Emerson	138,236	Apr. 29, 1873	901	284	3	472
Saw-teeth.	J. E. Emerson	142,781	Sept. 16, 1873	420	141	4	298
Saw-teeth.	W. P. Miller	142,258	Aug. 26, 1873	784	259	4	226
Saw-teeth blank.	J. E. Emerson	142,780	Sept. 16, 1873	419	141	4	298
Saw-teeth, Device for dressing.	W. Rowe	142,176	Aug. 26, 1873	716	237	4	220
Saw-teeth, Machine for cutting.	J. H. W. Onion and W. H. H. Larduskey.	135,934	Feb. 18, 1873	510	166	3	193
Saw-teeth, Machine for dressing.	J. Lucia	141,366	July 29, 1873	966	314	4	122
Saw-teeth, Removable.	J. Crookes	141,427	Aug. 5, 1873	16	4	4	136
Saw-teeth setting device.	G. W. Bugbee	141,990	Aug. 19, 1873	531	176	4	195
Saw-tooth gauge.	C. E. Grandy	142,390	Sept. 2, 1873	63	21	4	247
Saw, Wheel or pulley for band.	J. A. Roche and G. V. Orton	140,794	July 15, 1873	404	137	4	60
Scaffold.	J. F. Darley	134,737	Jan. 14, 1873	232	74	3	39
Scaffold.	M. D. Drake	140,688	July 8, 1873	308	104	4	45
Scaffold.	A. Gates	135,902	Feb. 18, 1873	485	157	3	191
Scaffold.	D. Y. Miller	139,726	June 10, 1873	270	85	3	647
Scaffold, Adjustable.	J. Dillon	144,263	Nov. 4, 1873	79	26	4	484
Scaffold, Adjustable.	J. S. Tilley	140,858	July 15, 1873	458	155	4	65
Scaffold-pole clamp.	H. Haering and H. Alles	143,448	Oct. 7, 1873	44	15	4	384
Scaffold-support.	R. A. Edmonston	141,498	Aug. 5, 1873	80	25	4	141
Scale, Bagholder weighing.	A. H. Bell	143,658	Oct. 14, 1873	238	80	4	408
Scale, Druggists'.	A. Cyrani and C. Reinhardt	139,372	May 27, 1873	828	265	3	596
Scale-pan.	J. P. Chatillon	143,499	Oct. 7, 1873	86	29	4	387
Scale-platform, Railway.	C. C. Warren	139,216	May 20, 1873	685	216	3	576
Scales, Platform.	J. Bryson	141,627	Aug. 12, 1873	207	65	4	160
Scales, Platform.	J. F. Keeler	139,897	June 17, 1873	435	135	3	667
Scales, Steelyard.	T. C. Hargrave	135,908	Feb. 18, 1873	489	158	3	192
Scales, Weighing.	W. Z. Conner	142,991	Sept. 23, 1873	598	203	4	323
Scales, Weighing.	S. Harris	141,556	Aug. 5, 1873	126	40	4	145
Scarf-clasp.	A. R. Weisz	144,170	Oct. 28, 1873	726	243	4	468
Scarf-ring.	J. Haack and S. Diolot	137,362	Apr. 1, 1873	77	25	3	363
Scarf-ring.	A. P. Mayhew and I. D. Leonard	143,366	Sept. 30, 1873	922	312	4	365
Scissors.	H. S. Breeden	144,251	Nov. 4, 1873	71	23	4	484
Scissors.	J. A. Correa	135,692	Feb. 11, 1873	290	91	3	162
Scissors.	A. Whittlemore	138,061	Apr. 22, 1873	729	231	3	450
Scissors and tape-line combined.	M. J. Stubbings	140,227	June 24, 1873	731	230	3	699
Scissors-points, Cap for.	C. W. Williams	144,177	Oct. 28, 1873	734	245	4	468
Scissors-sharpening device.	T. Halvorsen	137,135	Mar. 25, 1873	712	236	3	332
School-chair.	E. J. Piper	138,190	Apr. 22, 1873	841	266	3	459
Scoop, Cart-loading.	A. Vreeland	145,320	Dec. 9, 1873	259	86	4	618
Scoop for raising sunken coal.	R. Stiles	138,541	May 6, 1873	64	22	3	503
Scourer.							
See Knife-scourer.							
Scow, Dumping.	J. E. Bartlett	136,578	Mar. 11, 1873	219	73	3	272
Scow, Dumping.	A. T. Morris	138,179	Apr. 22, 1873	827	263	3	458
Scraper.	S. Horney	144,202	Nov. 4, 1873	27	8	4	480
Scraper.	W. E. and F. A. Jacobs	143,016	Sept. 23, 1873	619	210	4	325
Scraper.	W. D. Mayfield and J. M. Payne	140,935	July 15, 1873	536	178	4	71
Scraper.	A. H. Reid	139,816	June 10, 1873	353	109	3	653
Scraper, Artist's.	H. J. Haight	135,333	Jan. 28, 1873	786	254	3	111
Scraper, Boiler-flue.	M. M. Ammidoun	138,465	May 6, 1873	1	1	3	497

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Scraper, Boiler-tube.....	J. B. Christoffel.....	137,826	Apr. 15, 1873	504	158	3	422
Scraper, Box.....	C., G. W., and J. D. Ellis.....	141,549	Aug. 5, 1873	121	38	4	145
Scraper, Dredging.....	D. Brabston.....	142,988	Sept. 23, 1873	595	202	4	323
Scraper, Gas-retort.....	L. Blair.....	135,397	Feb. 4, 1873	2	1	3	128
Scraper, Kettle and pan.....	E. J. Whitman.....	142,602	Sept. 9, 1873	258	84	4	274
Scraper, Road.....	D. S. Hamilton.....	139,669	June 10, 1873	211	69	3	642
Scraper, Road.....	J. Morton.....	141,808	Aug. 12, 1873	366	120	4	172
Scraper, Road.....	R. F. Read.....	144,925	Nov. 25, 1873	659	223	4	566
Scraper, Road.....	J. Steffensen.....	137,496	Apr. 1, 1873	204	62	3	373
Scraper, Road.....	M. E. Warner and S. W. Kingsley.....	144,935	Nov. 25, 1873	666	226	4	566
Scraper, Road.....	W. P. Warren.....	140,175	June 24, 1873	691	217	3	696
Scraper, Road.....	J. W. Weston.....	144,717	Nov. 18, 1873	473	160	4	540
Scraper, Road.....	L. P. Wright.....	139,099	May 20, 1873	576	181	3	568
Scraper, Wood.....	H. D. Spickler.....	137,329	Apr. 1, 1873	50	15	3	361
Scraping and loading machine.....	D. Marrs.....	135,042	Jan. 21, 1873	513	166	3	76
Scraping-instrument.....	V. Davis.....	135,699	Feb. 11, 1873	295	93	3	163
Screen:							
See Ash-screen.							
Car-window screen.							
Coal-screen.							
Folding screen.							
Potato-screen.							
Window-screen.							
Screw.....	J. Frearson.....	145,411	Dec. 9, 1873	334	112	4	624
Screw and clamp combined, Jack.....	T. R. and A. C. Jackson and C. S. Watson.....	139,157	May 20, 1873	637	198	3	572
Screw and nut.....	S. J. Peet.....	138,277	Apr. 27, 1873	943	298	3	475
Screw, Binding.....	F. Schurz.....	137,801	Apr. 15, 1873	486	152	3	421
Screw-blank nicking and shaving machine.....	E. Nugent and J. Fanning.....	144,693	Nov. 18, 1873	456	154	4	538
Screw-blanks, Machine for threading.....	E. Nugent and J. Fanning.....	145,121	Dec. 2, 1873	75	24	4	591
Screw-blanks, Machine for threading.....	E. Croft.....	142,560	Sept. 9, 1873	223	72, 73	4	272
Screw bolt and nut.....	T. English.....	135,898	Feb. 18, 1873	482	156	3	191
Screw, Boot-heel.....	W. Ackerman.....	141,908	Aug. 19, 1873	468	153	4	190
Screw-capping die.....	G. W. Briggs.....	134,845	Jan. 14, 1873	326	104	3	46
Screw, Casting center on cast-iron.....	T. M. Tucker.....	135,388	Jan. 28, 1873	834	269	3	114
Screw-cutting device.....	J. B. Low.....	135,830	Feb. 11, 1873	412	133	3	171
Screw-cutting die.....	S. D. Bates and S. W. Murray.....	137,223	Apr. 1, 1873	4	2	3	357
Screw-cutting die.....	W. E. Ward.....	134,777	Jan. 14, 1873	264	86	3	41
Screw-cutting machine.....	C. S. Crane and W. H. Lavinia.....	136,818	Mar. 18, 1873	431	143	3	298
Screw-cutting machine.....	G. Emig.....	134,871	Jan. 14, 1873	348	111	3	48
Screw-cutting machine.....	M. B. Flynn.....	143,685	Oct. 14, 1873	266	88	4	410
Screw-cutting machine.....	G. B. Jaycox and A. Webster.....	140,780	July 15, 1873	390	134	4	59
Screw-cutting machine.....	D. McGuire.....	140,212	June 24, 1873	721	227	3	698
Screw-cutting machine.....	J. Peace and W. P. Cox.....	141,234	July 29, 1873	839	273	4	112
Screw-cutting machine.....	A. and A. Phillips.....	140,161	June 24, 1873	679	213	3	695
Screw-cutting machine.....	H. O. Reed.....	141,460	Aug. 5, 1873	46	14	4	139
Screw-cutting machine.....	J. W. Row.....	136,269	Feb. 25, 1873	815	263	3	229
Screw-cutting machine.....	C. C. Walworth.....	141,299	July 29, 1873	898	294	4	117
Screw, Die-stock for cutting.....	J. J. Grant.....	136,153	Feb. 25, 1873	718	232	3	221
Screw-driver.....	J. H. Davis.....	141,857	Aug. 19, 1873	414	135	4	186
Screw-driver.....	F. B. Hunt.....	135,340	Jan. 28, 1873	792	256	3	111
Screw-driver.....	S. R. Kneeland.....	145,506	Dec. 16, 1873	430	140	4	644
Screw-driver.....	C. Law.....	139,069	May 20, 1873	551	173	3	565
Screw-forming machine.....	W. A. McCool.....	138,422	Apr. 29, 1873	1,074	338	3	485
Screw-heads, Machine for slotting.....	E. S. Pierce and J. A. Ayres.....	134,818	Jan. 14, 1873	302	97	3	44
Screw-making machine, Machine.....	J. Braun.....	138,067	Apr. 22, 1873	734	232	3	450
Screw-plate.....	T. L. Von Dorn.....	145,701	Dec. 16, 1873	598	195	4	658
Screw-rod.....	S. J. Peet.....	138,278	Apr. 29, 1873	944	298	3	475
Screw-tap.....	J. Flower.....	140,128	June 24, 1873	649	204	3	693
Screw-threading die.....	J. J. Grant.....	140,133	June 24, 1873	655	205	3	693
Screw-threading machine.....	E. Horton.....	144,100	Oct. 28, 1873	668	220 } 221 }	4	463
Screw-threads on bolt and screw blanks, Machine for swaging.....	R. Boeklen.....	139,861	June 17, 1873	399	125	3	664
Screw-threads on sheet-metal, Machine for forming.....	C. F. Neuber and F. W. Perry.....	145,893	Dec. 23, 1873	774	553	4	684
Screw, Wood.....	O. D. Barrett.....	143,217	Sept. 30, 1873	784	271	4	354
Screw, Wood.....	J. A. Bidwell and W. Chisholm.....	134,783	Jan. 14, 1873	270	88	3	42
Screw, Wood.....	W. Bourne.....	138,784	May 13, 1873	294	90	3	531
Screw, Wood.....	S. P. Burdick.....	137,414	Apr. 1, 1873	120	39	3	367
Screw, Wood.....	A. S. Ladd and C. N. Corning.....	142,112	Aug. 26, 1873	664	218	4	216
Screw, Wood.....	I. S. Russell.....	146,023	Dec. 30, 1873	911	295	4	705
Screw, Wood.....	J. K. Stockton.....	138,592	May 6, 1873	110	35	3	506
Screw-wrench.....	D. Frank.....	137,908	Apr. 15, 1873	577	181	3	428
Screws, Divided-nut device for feed.....	F. A. Huntington.....	143,626	Oct. 14, 1873	211	71	4	406
Screws for knobs, Machine for making double-pointed.....	C. H. Thurston.....	145,136	Dec. 2, 1873	93	30, 31	4	593
Screws, Machine for making metal.....	N. C. Hubbell.....	143,412	Oct. 7, 1873	13	4, 5, 6	4	382
Screws, Machine for making metal.....	C. M. Spencer.....	143,306	Sept. 30, 1873	863	296	4	361
Screws of rolls, Device for adjusting the elevating and depressing.....	R. H. Thomas.....	138,452	Apr. 29, 1873	1,099	347	3	488
Scrubber.....	I. J. Emory, jr.....	138,322	Apr. 29, 1873	988	310	3	479
Scrubbing-machine.....	S. H. Bush.....	138,129	Apr. 22, 1873	781	250	3	454
Scrubbing-machine.....	W. J. Gard.....	145,796	Dec. 22, 1873	690	226	4	677
Scythe.....	E. L. Wheeler.....	134,779	Jan. 14, 1873	265	87	3	42
Scythe-rolling machine.....	H. Waters.....	137,741	Apr. 8, 1873	425	131	3	403
Scythe-rolling machine.....	H. Waters.....	138,216	Apr. 22, 1873	860	272 } 273 }	3	460
Scythe-stone holder.....	J. L. Morrison and T. H. Fletcher.....	137,560	Apr. 8, 1873	262	81	3	39
Seal-bolt.....	J. E. Thomson.....	144,370	Nov. 4, 1873	164	55	4	492
Sealed can.....	W. H. I. Howe.....	136,920	Mar. 18, 1873	515	169	3	305
Sealing-wax mold.....	I. L. Baker.....	193,866	Oct. 21, 1873	447	149	4	435
Sealing-wax package.....	W. J. Lumb.....	143,771	Oct. 21, 1873	365	121	4	428
Seal-lock.....	G. R. Dunn.....	140,486	July 1, 1873	120	41	4	18
Seal-lock.....	F. C. Hamilton.....	139,786	June 10, 1873	326	101	3	651
Seal-lock.....	J. Kinzer.....	138,566	May 6, 1873	90	29	3	505
Seal-lock.....	G. L. Kitson and J. Bennor.....	135,818	Feb. 11, 1873	403	130	3	171

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Seal-lock, &c	D. K. Miller	143, 831	Oct. 21, 1873	418	139	4	432
Seal-lock	T. Slaight	141, 519	Aug. 5, 1873	96	29	4	143
Seal-lock	J. E. Thomson	143, 201	Sept. 23, 1873	764	264	4	337
Seal-lock	J. E. Thomson	143, 544	Oct. 7, 1873	126	42	4	391
Seal-lock for box	H. C. Marston	138, 670	May 6, 1873	181	58	3	512
Seaming-machine	A. S. Munger	144, 691	Nov. 18, 1873	453	153	4	538
Seaming-machine, Sheet-metal	C. Brombacher	139, 863	June 17, 1873	400	125	3	664
Seaming-machine, Sheet-metal	G. D. Brooks	140, 678	July 8, 1873	300	101	4	44
Seamless can, Machine for forming	M. Von Culin	143, 735	Oct. 14, 1873	315	105	4	414
Seams, Mode of forming turned	S. W. Shorey	137, 966	Apr. 15, 1873	623	197	3	432
Seat:							
<i>See</i> Car-seat.							
Carriage-seat.							
Carriage and wagon seat.							
Chair-seat.							
Harvester-seat.							
Jump-seat.							
Lawn-seat.							
Revolving-seat.							
Spring-seat.							
Vehicle-seat.							
Wagon-seat.							
Seat	J. Peard	138, 183	Apr. 22, 1873	832	264	3	458
Secretary, wardrobe, and bedstead, Combined	A. Weeks	145, 703	Dec. 16, 1873	600	196	4	658
Security-hook	J. K. Macdonald	135, 228	Jan. 28, 1873	691	222	3	103
Seed-drill	E. G. Matthews	139, 074	May 20, 1873	556	175	3	566
Seed-drill	D. N. Minor	145, 889	Dec. 23, 1873	771	252	4	684
Seed-drill	R. H. D. Morrison	145, 443	Dec. 9, 1873	360	120	4	626
Seed-drill and planter	W. F. West	142, 599	Sept. 9, 1873	255	83, 84	4	274
Seed-dropper	J. M. Forden	139, 565	June 3, 1873	105	35	3	617
Seed-dropper	J. M. Forden	144, 327	Nov. 4, 1873	128	43	4	489
Seed-dropper	E. L. Gross	139, 143	May 20, 1873	620	193	3	571
Seed-dropper	F. W. Young	135, 743	Feb. 11, 1873	329	105	3	165
Seed-dropper	F. W. Young	142, 320	Aug. 26, 1873	833	277	4	229
Seed-separator	F. W. Mase	145, 668	Dec. 16, 1873	568	187	4	655
Seed-separator	F. C. Miller	142, 170	Aug. 26, 1873	710	235	4	219
Seed-separator and drill, Combined	P. D. Shepherd	137, 965	Apr. 15, 1873	622	196	3	432
Seeder, Broadcast	J. D. Huffman	138, 403	Apr. 29, 1873	1, 050	331	3	484
Seeder, Broadcast	H. Ogborn and A. W. Kendrick	136, 174	Feb. 25, 1873	734	236	3	223
Seeder, Broadcast	J. R. Scarborough	145, 018	Nov. 25, 1873	737	249	4	572
Seeder, Hand	J. E. Garside	134, 986	Jan. 21, 1873	459	147	3	72
Seeding-machine	D. Caine	137, 051	Mar. 25, 1873	637	210	3	326
Seeding-machine	S. B. Miller	137, 708	Apr. 8, 1873	391	121	3	400
Seeding-machine	S. G. Randall	137, 026	Mar. 18, 1873	604	200	3	312
Seeding-machine	M. Schnapp	145, 019	Nov. 25, 1873	737	249	4	572
Seeding-machine	H. C. Stephens	141, 472	Aug. 5, 1873	57	17	4	139
Seeding-machine	H. F. Stinde	140, 961	July 15, 1873	559	{ 187 } { 188 }	{ 4 }	73
Seeding-machine	G. F. Stroud	141, 143	July 22, 1873	736	244	4	96
Seeding-machine	J. W. Strowbridge	136, 107	Feb. 18, 1873	659	215	3	205
Seeding-machine	E. Witzigman	144, 879	Nov. 25, 1873	624	212	4	562
Self-acting switch	L. W. Harris	139, 956	June 17, 1873	479	150	3	670
Self-operating switch	A. Boucharde	141, 537	Aug. 5, 1873	110	35	4	144
Self-waiting table	W. W. Patteson	138, 687	May 6, 1873	195	62	3	513
Self-waiting table	J. F. Schultz	139, 267	May 27, 1873	746	236	3	589
Self-waiting table	M. Stone	135, 382	Jan. 28, 1873	829	267	3	114
Separator:							
<i>See</i> Clover-separator.							
Coal-separator.							
Coal and ore separator.							
Grain-separator.							
Metal-separator.							
Middlings separator.							
Ore-separator.							
Seed-separator.							
Thrashing-machine separator.							
Settee	J. and E. R. Holzer	139, 389	May 27, 1873	850	{ 271 } { 272 }	{ 3 }	597
Settee, Extension	C. Beatty	138, 842	May 13, 1873	346	167	3	536
Sewage, Treatment of	F. Hillé	138, 250	Apr. 29, 1873	917	289	3	473
Sewer-basin for street-corner	J. H. Boschen	142, 671	Sept. 9, 1873	315	105	4	279
Sewer-bottom cement	M. Day	144, 961	Nov. 25, 1873	688	232	4	568
Sewer-cleaner	J. H. Jennings	142, 238	Aug. 26, 1873	769	253	4	224
Sewer, Cleaning	B. Latham	145, 111	Dec. 2, 1873	64	.....	4	590
Sewer-cleaning apparatus	W. H. Chase	137, 290	Apr. 1, 1873	10	3	3	358
Sewer gas-trap	G. C. Anthon	141, 412	Aug. 5, 1873	1	1	4	135
Sewer-inlet, Grating for	H. W. Clapp	134, 978	Jan. 21, 1873	453	145	3	72
Sewer-inlet trap	J. Hitchcock	137, 447	Apr. 1, 1873	149	49	3	369
Sewer-inlet trap	G. R. Moore	143, 774	Oct. 21, 1873	368	122	4	428
Sewing and other machinery, Brake for preventing retrograde movement in	Peek	141, 166	July 22, 1873	760	250	4	98
Sewing books, Machine for	C. H. Palmer	135, 662	Feb. 11, 1873	258	82	3	160
Sewing-case	F. Benkendorff	142, 762	Sept. 16, 1873	403	136	4	297
Sewing-machine	E. W. Beebe	139, 040	May 20, 1873	519	164	3	563
Sewing-machine	A. Bingham	135, 194	Jan. 28, 1873	654	211	3	100
Sewing-machine	H. A. Blanchard	141, 987	Aug. 19, 1873	528	175	4	195
Sewing-machine	R. Chandler	139, 368	May 27, 1873	826	264	3	596
Sewing-machine	D. H. Coles	138, 381	Apr. 29, 1873	1, 033	325	3	483
Sewing-machine	C. S. Cushman	141, 332	July 29, 1873	928	303	4	120
Sewing-machine	C. S. Cushman	142, 442	Sept. 2, 1873	108	35	4	251
Sewing-machine	J. A. Davis	138, 996	May 20, 1873	484	153	3	560
Sewing-machine	A. S. Dinsmore	136, 976	Mar. 18, 1873	559	186	3	308
Sewing-machine	J. V. D. Eldredge	136, 823	Mar. 18, 1873	435	144	3	299
Sewing-machine	J. Fanning and E. Nugent	145, 287	Dec. 9, 1873	228	77	4	616
Sewing-machine	O. Farrar	136, 314	Feb. 25, 1873	850	274	3	232

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Sewing-machine	E. A. Goodes	136, 718	Mar. 11, 1873	332	{ 110 111	3	281
Sewing-machine	E. A. Goodes	142, 013	Aug. 19, 1873	552	{ 182 283	4	197
Sewing-machine	C. Gullmann	136, 057	Feb. 18, 1873	613	{ 201 202	3	201
Sewing-machine	T. Henderson and W. G. Wright	139, 245	May 27, 1873	727	{ 229 230	3	587
Sewing-machine	W. Hiron and J. D. Moore	141, 791	Aug. 12, 1873	352	116	4	171
Sewing-machine	J. A. House	145, 570	Dec. 16, 1873	486	{ 159 160	4	649
Sewing-machine	G. W. Hunter	143, 766	Oct. 21, 1873	361	120	4	428
Sewing-machine	J. T. Jones	136, 324	Feb. 25, 1873	860	277	3	232
Sewing-machine	T. K. Keith	139, 962	June 17, 1873	483	152	3	671
Sewing-machine	M. H. Kernal	138, 163	Apr. 22, 1873	810	258	3	456
Sewing-machine	F. Koch and R. Brass	138, 898	May 13, 1873	391	123	3	540
Sewing-machine	F. Koch and R. Brass	145, 215	Dec. 2, 1873	158	54, 55	4	598
Sewing-machine	L. W. Lathrop	139, 067	May 20, 1873	547	{ 172 173	3	565
Sewing-machine	C. Lewis and J. Soothill	138, 902	May 13, 1873	394	124	3	540
Sewing-machine	J. B. Lincoln and C. F. Clough	140, 584	July 8, 1873	221	74	4	38
Sewing-machine	W. S. Lincoln and W. A. Rayer	137, 007	Mar. 18, 1873	587	195	3	311
Sewing-machine	I. Manning	145, 515	Dec. 16, 1873	440	144	4	644
Sewing-machine	J. N. Mc. Lean and J. Bennor	135, 000	Jan. 21, 1873	473	152	3	73
Sewing-machine	T. L. Melone	140, 787	July 15, 1873	396	136	4	60
Sewing-machine	J. C. Moore	135, 930	Feb. 18, 1873	507	165	3	193
Sewing-machine	J. P. Noyes	143, 027	Sept. 23, 1873	627	{ 213 214	4	326
Sewing-machine	J. O'Neil	137, 618	Apr. 8, 1873	310	96	3	394
Sewing-machine	C. H. Palmer	145, 814	Dec. 23, 1873	704	{ 231 232	4	679
Sewing-machine	W. C. Pickersgill	136, 616	Mar. 11, 1873	247	83	3	274
Sewing-machine	D. Porter	144, 864	Nov. 25, 1873	614	209	4	562
Sewing-machine	W. A. Rayer and W. S. Lincoln	142, 042	Aug. 19, 1873	584	192	4	199
Sewing-machine	G. Riehfuss	137, 028	Mar. 18, 1873	607	201	3	312
Sewing-machine	E. F. Richardson	145, 687	Dec. 16, 1873	584	192	4	657
Sewing-machine	D. H. Rogan	137, 321	Apr. 1, 1873	38	12	3	360
Sewing-machine	E. D. Smith	140, 438	July 1, 1873	80	28	4	15
Sewing-machine	J. A. Smith	140, 654	July 8, 1873	281	95	4	42
Sewing-machine	D. M. Smyth	141, 088	July 22, 1873	687	{ 230 231	4	92
Sewing-machine	O. St. Amant	145, 025	Nov. 25, 1873	743	{ 251 252	4	573
Sewing-machine	J. T. Tobey	139, 745	June 10, 1873	289	90	3	648
Sewing-machine	G. C. Walters	137, 640	Apr. 8, 1873	329	102	3	395
Sewing-machine	S. W. Wardwell	141, 245	July 29, 1873	850	{ 277 278	4	113
Sewing-machine	T. A. Weber	145, 823	Dec. 23, 1873	710	234	4	679
Sewing-machine	G., Jr., and J. F. Webster	139, 444	May 27, 1873	899	290	3	601
Sewing-machine	W. M. Whiting	141, 303	July 29, 1873	901	296	4	117
Sewing-machine	J. H. Whitney	134, 961	Jan. 14, 1873	424	136	3	54
Sewing-machine attachment	E. H. Alexander	140, 233	June 24, 1873	737	232	3	700
Sewing-machine attachment	J. M. Grist	136, 651	Mar. 11, 1873	278	93	3	277
Sewing-machine attachment	T. J. Peaslee	136, 859	Mar. 18, 1873	462	153	3	301
Sewing-machine attachment	F. N. Violet	134, 826	Jan. 14, 1873	312	99	3	45
Sewing-machine attachments, Clamp for	J. G. Powell	142, 812	Sept. 16, 1873	442	149	4	300
Sewing-machine attachment for making button-holes	J. F. Haskins	146, 000	Dec. 30, 1873	889	{ 288 289	4	704
Sewing-machine balance-wheel	D. G. Williams	140, 982	July 15, 1873	581	196	4	75
Sewing-machine binder	M. J. Stoll	135, 381	Jan. 28, 1873				
Sewing-machine bobbin holder	W. F. and J. Barnes, and P. Mesick	141, 981	Aug. 19, 1873	829	267	3	114
Sewing-machine bobbin winder	A. B. Bary	137, 048	Mar. 25, 1873	522	173	4	195
Sewing-machine bobbin-winder	T. Pedden	141, 663	Aug. 12, 1873	635	210	3	326
Sewing machine, Boot and shoe	W. Duchemin	135, 032	Jan. 21, 1873	239	75	4	162
Sewing machine, Boot and shoe	W. Duchemin	135, 787	Feb. 11, 1873	503	162	3	76
Sewing machine, Boot and shoe	W. Duchemin	135, 787	Feb. 11, 1873	366	{ 118 119	3	168
Sewing machine, Boot and shoe	G. V. Sheffield	135, 047	Jan. 21, 1873	517	{ 167 168	3	77
Sewing-machine box-plaiting attachment	O. M. Chamberlain	137, 343	Apr. 1, 1873	61	19	3	362
Sewing-machine braider	E. H. Alexander	136, 354	Mar. 4, 1873	1	1	3	245
Sewing-machine braider	E. H. Alexander	136, 355	Mar. 4, 1873	2	1	3	245
Sewing-machine braider	J. P. Chaffee	140, 012	June 17, 1873	523	166	3	674
Sewing-machine brake	R. Gladney	138, 881	May 13, 1873	379	118	3	538
Sewing-machine brake	C. E. Kimball	138, 897	May 13, 1873	391	122	3	539
Sewing-machine, Button-hole	S. Cleminshaw	139, 770	June 10, 1873	313	97	3	650
Sewing-machine, Button-hole	G. Kallmeyer	137, 689	Apr. 8, 1873	373	116	3	399
Sewing-machine, Button-hole stitching attachment for	C. A. Hansen and G. Harley	144, 672	Nov. 18, 1873	436	147	4	537
Sewing-machine button-holding attachment	E. Morean	134, 558	Jan. 7, 1873	52	16, 17	3	11
Sewing-machine cabinet	G. Range	138, 435	Apr. 29, 1873	1, 082	342	3	486
Sewing-machine chair	F. Chichester	135, 465	Feb. 4, 1873	68	21	3	133
Sewing-machine chair, Adjustable	F. Chichester	138, 073	Apr. 22, 1873	739	234	3	451
Sewing-machine, Clamp for button-hole	W. Chicken	136, 702	Mar. 11, 1873	319	105	3	280
Sewing-machine cloth-holder	L. A. Dupré	140, 406	July 1, 1873	57	20	4	13
Sewing-machine corder	J. G. Powell	143, 589	Oct. 14, 1873	177	60	4	403
Sewing-machine cover	C. B. Grover	136, 506	Mar. 4, 1873	134	43	3	256
Sewing-machine cover	C. W. Reed	136, 762	Mar. 11, 1873	370	{ 122 123	3	284
Sewing-machine cover, Binding for	E. F. French	138, 324	Apr. 29, 1873	989	311	3	479
Sewing-machine cover hook	J. C. Egly	135, 100	Jan. 21, 1873	555	181	3	80
Sewing-machine cutter	L. H. Allen	139, 350	May 27, 1873	812	259	3	594
Sewing-machine cutting-attachment	A. T. Perrine	140, 159	June 24, 1873	677	213	3	695
Sewing-machine cutting-attachment	W. H. Sample	144, 480	Nov. 11, 1873	268	91	4	512
Sewing-machine cutting-attachment	J. E. Wiggins	139, 425	June 3, 1873	69	23, 24	3	615

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Sewing-machine driving-motor	R. A. Atwell	142,551	Sept. 9, 1873	214	69, 70	4	271
Sewing-machine embroidering-attachment	I. M. Rose	136,098	Feb. 18, 1873	649	213	3	204
Sewing-machine embroidery-attachment	A. W. Johnson	142,478	Sept. 2, 1873	140	46	4	253
Sewing-machine extension-table	J. Bennor	136,959	Mar. 18, 1873	545	180	3	307
Sewing-machine extension-table	J. Bennor	140,877	July 15, 1873	472	160	4	66
Sewing-machine fan-attachment	R. Jackson	143,015	Sept. 23, 1873	618	210	4	325
Sewing-machine fan-attachment	E. Kempe	139,584	June 3, 1873	120	40	3	619
Sewing-machine fan-attachment	C. B. Veronee	135,868	Feb. 11, 1873	439	143	3	173
Sewing-machine feeding-mechanism	C. Parham	135,579	Feb. 4, 1873	176	55	3	141
Sewing-machine feeding-mechanism	W. and E. Westmoreland	140,603	July 8, 1873	241	81	4	39
Sewing-machine, Folding-cover for	S. J. Pusey	141,169	July 22, 1873	764	250	4	98
Sewing-machine folding-guide	J. E. Earle	139,378	May 27, 1873	835	268	3	596
Sewing-machine folding-guide	S. W. Wood	138,306	Apr. 29, 1873	972	305 306	3 3	477
Sewing-machine for banding hats	J. Stewart, jr.	141,397	July 29, 1873	995	323	4	124
Sewing-machine for quilting	J. Happe and W. Newman	137,199	Mar. 25, 1873	773	255	3	336
Sewing-machine for turned shoes	T. L. Miller	140,586	July 8, 1873	224	75	4	38
Sewing-machine gathering and ruffling attachment	A. Johnston	146,005	Dec. 30, 1873	894	290	4	704
Sewing-machine gathering and ruffling attachment	J. Wise	143,049	Sept. 23, 1873	648	222	4	327
Sewing-machine gathering attachment	T. S. Huntington	137,002	Mar. 18, 1873	583	194	3	310
Sewing-machine gathering or ruffling attachment	A. Johnston	135,122	Jan. 21, 1873	572	187	3	81
Sewing-machine gathering or ruffling attachment	A. Johnston	135,123	Jan. 21, 1873	575	187	3	81
Sewing-machine guide	W. A. Springer	142,819	Sept. 16, 1873	447	151	4	300
Sewing-machine hemmer	W. L. Apthorp	144,649	Nov. 18, 1873	422	141	4	535
Sewing-machine hemmer	E. Booth	138,371	Apr. 29, 1873	1,025	323	3	492
Sewing-machine hemmer	S. H. and J. M. Bryant, and H. L. McGaw	144,736	Nov. 18, 1873	490	166	4	541
Sewing-machine hemmer	F. Caswell	141,993	Aug. 19, 1873	534	176	4	196
Sewing-machine hemmer	J. V. D. Eldredge	142,689	Sept. 9, 1873	328	109	4	280
Sewing-machine hemmer	H. A. Ellis	136,495	Mar. 4, 1873	124	40	3	255
Sewing-machine hemmer	H. C. Goodrich and R. Barnum	138,638	May 6, 1873	150	48	3	510
Sewing-machine hemmer	J. M. Griest	144,333	Nov. 4, 1873	133	45	4	489
Sewing-machine hemmer	J. F. Johnson	143,160	Sept. 23, 1873	730	252	4	334
Sewing-machine hemmer	A. McMillan	141,576	Aug. 5, 1873	143	46	4	147
Sewing-machine hemmer	L. Schultz	142,519	Sept. 2, 1873	176	58	4	256
Sewing-machine hemmer	L. Sexauer	144,706	Nov. 18, 1873	465	158	4	539
Sewing-machine lamp-bracket	L. M. N. Wolf	138,831	May 13, 1873	336	103	3	535
Sewing-machine lock	E. L. Gaylord	135,270	Jan. 28, 1873	728	233	3	106
Sewing-machine motor	B. C. Chambers	141,996	Aug. 19, 1873	536	177	4	196
Sewing-machine motor	W. R. Dunton	134,526	Jan. 7, 1873	21	7	3	9
Sewing-machine motor	G. W. Manson	141,367	July 29, 1873	966	314	4	122
Sewing-machine motor	W. Young	140,607	July 8, 1873	244	82	4	39
Sewing-machine needle-blanks, Machine for turning	J. Brooks	135,767	Feb. 11, 1873	350	112 113	3 3	167
Sewing-machine needle setter and threader	C. F. Albert	139,990	June 17, 1873	504	160	3	673
Sewing-machine needle setter and threader	G. P. Farmer	140,262	June 24, 1873	761	240	3	702
Sewing-machine needle-threader	C. T. Beardsley	142,430	Sept. 2, 1873	94	31	4	250
Sewing-machine needle-threader	T. Schofield	143,098	Sept. 23, 1873	686	236	4	330
Sewing-machine needle-threader	M. A. and J. T. Williams	140,983	July 15, 1873	582	196	4	75
Sewing-machine needles, Cushion and sharpener for	J. D. Nesbitt	135,931	Feb. 18, 1873	508	165	3	193
Sewing-machine needles, Machine for grooving	H. Freimuth and A. Büttner	136,430	Mar. 4, 1873	64	23	3	250
Sewing-machine oil-cup support	L. N. Leslie	136,327	Feb. 25, 1873	862	277	3	233
Sewing-machine plaiter	O. M. Chamberlain	139,657	June 10, 1873	199	65	3	641
Sewing-machine plaiting-attachment	O. M. Chamberlain	137,342	Apr. 1, 1873	60	18, 19	3	361
Sewing-machine plaiting-attachment	W. Walker	141,407	July 29, 1873	1,006	327	4	125
Sewing-machine plaiting-attachment	W. Walker	141,610	Aug. 5, 1873	175	56	4	149
Sewing-machine power	A. W. Cochran	142,839	Sept. 16, 1873	466	157	4	302
Sewing-machine presser-foot	G. W. Allerton and Z. M. Powers	139,700	June 10, 1873	248	78	3	645
Sewing-machine presser-foot	H. C. Goodrich	138,637	May 6, 1873	150	48	3	510
Sewing-machine quilting-attachment	W. H. Heffley	138,399	Apr. 29, 1873	1,047	330	3	484
Sewing-machine quilting-attachment	W. H. Null	143,092	Sept. 23, 1873	680	234	4	330
Sewing-machine quilting-guide	F. G. Buschmeier	145,841	Dec. 23, 1873	726	238	4	680
Sewing-machine ruffler	G. E. Dolton	139,883	June 17, 1873	419	131	3	666
Sewing-machine ruffler	J. S. Hugg and J. T. Stewart	136,162	Feb. 25, 1873	724	234	3	222
Sewing-machine ruffler	W. H. Lewitt	140,285	June 24, 1873	782	248	3	704
Sewing-machine ruffler	T. G. Perkins	135,359	Jan. 28, 1873	808	261	3	112
Sewing-machine ruffler	C. Schullian	143,259	Sept. 30, 1873	823	282	4	358
Sewing-machine ruffler	M. J. Stoll	140,557	July 1, 1873	184	62	4	23
Sewing-machine ruffler	C. M. Woolworth	142,543	Sept. 2, 1873	198	64	4	258
Sewing-machine ruffler and gatherer	A. Johnston	139,064	May 20, 1873	544	171	3	565
Sewing-machine ruffler and gatherer	F. Sievers	139,089	May 20, 1873	568	178	3	567
Sewing-machine ruffling-attachment	H. C. Goodrich	134,744	Jan. 14, 1873	237	76	3	40
Sewing-machine ruffling-attachment	T. S. Huntington	137,003	Mar. 18, 1873	583	194	3	310
Sewing-machine ruffling-attachment	E. Stewart	136,676	Mar. 11, 1873	300	100	3	278
Sewing-machine ruffling or plaiting attachment	A. Johnston	137,686	Apr. 8, 1873	370	115	3	398
Sewing-machine ruffling or plaiting attachment	A. Rush	143,424	Oct. 7, 1873	26	10	4	383
Sewing-machine shoe	J. G. Ross and T. L. Miller	138,764	May 13, 1873	276	85, 86	3	530
Sewing-machine shuttle	W. Cooney	138,134	Apr. 22, 1873	786	251	3	455
Sewing-machine shuttle	G. A. Edwards and G. Schieder	136,311	Feb. 25, 1873	847	273	3	231
Sewing-machine shuttle	C. W. Ells	137,665	Apr. 8, 1873	353	109	3	397
Sewing-machine shuttle	W. Hockensmith	140,041	June 17, 1873	552	174	3	677
Sewing-machine shuttle	G. W. Hunter	145,348	Dec. 9, 1873	282	94	4	620
Sewing-machine shuttle	J. Knox	144,395	Nov. 11, 1873	197	67	4	506
Sewing-machine shuttle	G. Rehfuß	139,421	May 27, 1873	882	283	3	600
Sewing-machine shuttle	W. H. Schofield	143,303	Sept. 30, 1873	861	295	4	361
Sewing-machine shuttle	J. B. Secor	141,894	Aug. 19, 1873	456	149	4	189
Sewing-machine shuttle	W. H. Thayer	143,104	Sept. 23, 1873	690	237	4	331
Sewing-machine shuttle-bobbin	G. Juengst	135,125	Jan. 21, 1873	578	188	3	82
Sewing-machine shuttles, Die for forming	W. H. Thayer	136,282	Feb. 25, 1873	826	267	3	230
Sewing-machine stand	D. W. Hale	134,541	Jan. 7, 1873	36	11	3	10
Sewing-machine stand	H. Loth	140,929	July 15, 1873	528	176	4	70
Sewing-machine stand	R. M. Wanzer	137,983	Apr. 15, 1873	637	201	3	433

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Sewing-machine stop	D. S. Alling	135,461	Feb. 4, 1873	65	20	3	132
Sewing-machine table	J. Bendor	140,874	July 15, 1873	470	159	4	66
Sewing-machine table	J. Bendor	140,875	July 15, 1873	471	159	4	66
Sewing-machine table	J. Bendor	140,876	July 15, 1873	472	160	4	66
Sewing-machine table	J. Bendor	141,985	Aug. 19, 1873	526	174	4	195
Sewing-machine table	J. Bendor	143,742	Oct. 21, 1873	342	114	4	426
Sewing-machine table	J. Bendor	145,612	Dec. 16, 1873	521	171	4	652
Sewing-machine table	W. H. Boyer	143,611	Oct. 14, 1873	198	66	4	405
Sewing-machine table	J. W. Cheney	136,701	Mar. 11, 1873	318	105	3	280
Sewing-machine table	W. M. Cuthbert	136,903	Mar. 18, 1873	499	165	3	303
Sewing-machine table	E. A. Jeffery	142,024	Aug. 19, 1873	563	186	4	198
Sewing-machine table	H. Loth	134,904	Jan. 14, 1873	377	120	3	50
Sewing-machine table	H. Loth	134,905	Jan. 14, 1873	378	120	3	50
Sewing-machine table	H. Loth	135,827	Feb. 11, 1873	410	132	3	171
Sewing-machine table	J. B. McLure	134,759	Jan. 14, 1873	248	81	3	40
Sewing-machine table	T. W. Morrison	139,805	June 10, 1873	344	106	3	652
Sewing-machine table	S. J. Pusey	136,543	Mar. 4, 1873	174	56	3	259
Sewing-machine table	J. J. Wheat	136,798	Mar. 11, 1873	399	132	3	286
Sewing-machine table	F. R. Wolfinger	141,250	July 29, 1873	857	279	4	113
Sewing-machine table and chair combined	L. N. B. Gray	140,362	July 1, 1873	23	8	4	10
Sewing-machine table-attachments	M. A. Browne	136,410	Mar. 4, 1873	50	18	3	249
Sewing-machine table-cover	E. A. Jeffery	135,121	Jan. 21, 1873	572	187	3	81
Sewing-machine table-cover	H. Jensen	141,561	Aug. 5, 1873	132	42	4	146
Sewing-machine table, &c., Lock for	J. B. Logan	142,708	Sept. 9, 1873	344	115	4	282
Sewing-machine table-top	W. Wilson	135,392	Jan. 28, 1873	837	270	3	115
Sewing-machine tension-indicator	D. B. Tiffany	136,626	Mar. 11, 1873	260	87	3	275
Sewing-machine thread-cutter	F. Collins	134,518	Jan. 7, 1873	15	5	3	8
Sewing-machine thread-cutter	N. Evinger	144,326	Nov. 4, 1873	128	43	4	489
Sewing-machine thread-cutter	C. J. Henry and C. J. Wood	134,669	Jan. 7, 1873	162	53	3	19
Sewing-machine thread-cutter	C. J. Henry and C. J. Wood	138,153	Apr. 22, 1873	801	255	3	456
Sewing-machine thread-cutter	A. M. Leslie	138,412	Apr. 29, 1873	1,060	333	3	485
Sewing-machine thread-cutter	F. V. Oburg	137,947	Apr. 15, 1873	605	191	3	431
Sewing-machine thread-cutting mechanism	A. Webber	143,046	Sept. 23, 1873	646	221	4	327
Sewing-machine thread-waxing attachment	C. E. Lewis	134,606	Jan. 7, 1873	102	33	3	15
Sewing-machine tray	G. A. Kirchner	136,525	Mar. 4, 1873	155	50	3	258
Sewing-machine trimming-attachment	W. A. Springer	142,290	Aug. 26, 1873	810	268	4	228
Sewing-machine treadle	S. B. Bushfield	140,677	July 8, 1873	300	101	4	44
Sewing-machine treadle	C. F. Clough and J. B. Lincoln	137,179	Mar. 25, 1873	751	249	3	335
Sewing-machine treadle	M. H. Knapp	142,704	Sept. 9, 1873	340	114	4	281
Sewing-machine treadle	C. J. F. Kraft	136,377	Mar. 4, 1873	24	8	3	247
Sewing-machine treadle	A. B. Shaw	134,820	Jan. 14, 1873	306	98	3	45
Sewing-machine treadle	F. Smiley	141,240	July 29, 1873	845	275	4	112
Sewing-machine treadle	W. H. Stewart	144,366	Nov. 4, 1873	161	53, 54	4	491
Sewing-machine treadle	W. D. Wood	140,865	July 15, 1873	464	157	4	65
Sewing-machine treadle, Adjustable	J. McEvoy	141,722	Aug. 12, 1873	285	93	4	166
Sewing-machine treadles, Clutch mechanism for	J. Tisdale	135,297	Jan. 23, 1873	750	242	3	108
Sewing-machine treadles, Foot-warming attachment for	A. R. Bush	136,582	Mar. 11, 1873	223	74	3	272
Sewing-machine tuck-creaser	S. P. Babcock	143,741	Oct. 21, 1873	341	114	4	426
Sewing-machine tuck-creaser	R. S. Barnum	135,065	Jan. 21, 1873	532	172	3	78
Sewing-machine tuck-creaser	W. J. Faulkner	143,975	Oct. 28, 1873	561	186	4	454
Sewing-machine tuck-creaser	A. Johnston	135,919	Feb. 18, 1873	498	162	3	192
Sewing-machine tuck-creaser	W. D. Kane	139,249	May 27, 1873	730	231	3	588
Sewing-machine tuck-creaser	E. Powell	146,094	Dec. 30, 1873	973	314	4	711
Sewing-machine tuck-creaser	J. T. Stewart	137,108	Mar. 25, 1873	689	229	3	330
Sewing-machine tuck-marker	H. C. Goodrich	138,635	May 6, 1873	148	48	3	510
Sewing-machine tuck-marker	H. C. Goodrich	138,636	May 6, 1873	149	48	3	510
Sewing-machine tucker	D. and E. B. Barnum	137,047	Mar. 25, 1873	633	209	3	326
Sewing-machine tucker	J. H. Bean	141,623	Aug. 12, 1873	203	64	4	159
Sewing-machine tucker	J. H. Bean	145,482	Dec. 16, 1873	403	132	4	642
Sewing-machine tucker	F. W. Brown	141,626	Aug. 12, 1873	206	65	4	160
Sewing-machine tucker	J. S. Oakley	137,232	Mar. 25, 1873	801	264	3	338
Sewing-machine tucking-attachment	E. Bouillon	138,730	May 13, 1873	246	77	3	527
Sewing-machine water-wheel attachment	C. H. Palmer	136,452	Mar. 4, 1873	84	29	3	252
Sewing-machine, Wax-thread	E. E. Bean	134,508	Jan. 7, 1873	6	2	3	8
Sewing-machine, Wax-thread	E. E. and F. Bean	134,509	Jan. 7, 1873	7	3	3	8
Sewing-machine, Wax-thread	E. E. and F. Bean	137,528	Apr. 8, 1873	235	72	3	387
Sewing-machine, Wax-thread	W. H. Johnson	135,431	Feb. 4, 1873	36	10, 11	3	130
Sewing-machine, Wax-thread	A. Tittman	136,792	Mar. 11, 1873	395	131	3	286
Sewing-machine, Frame for holding work on	E. M. Turner	146,110	Dec. 30, 1873	989	319	4	712
Sewing-machine, Mechanism for operating	D. Whitlock	134,780	Jan. 14, 1873	266	87	3	42
Sewing-machine, Mode of operating	E. Wright	142,544	Sept. 2, 1873	198	64	4	258
Sewing-machine, Movable cloth-plate for	R. L. Leech	142,404	Sept. 2, 1873	75	24	4	248
Sewing-machine, Rotating-hook for	A. and J. Aird	136,635	Mar. 11, 1873	266	89	3	276
Sewing shoes, Guide for	H. Bond	143,955	Oct. 28, 1873	543	180	4	453
Sewing shoes, Guide for	L. E. De Waru	143,969	Oct. 28, 1873	554	184	4	453
Sewing-stand	L. J. Fling and A. Land	145,858	Dec. 23, 1873	742	242, 243	4	681
Shade-holder	L. J. Atwood	141,252	July 29, 1873	858	280	4	113
Shade-holder	M. W. House	137,306	Apr. 1, 1873	23	7	3	359
Shade-holder	T. Moran	141,806	Aug. 12, 1873	364	119	4	172
Shaft-bearing	G. M. Ball	135,506	Feb. 4, 1873	102	32	3	135
Shaft-bearing	C. Bird and W. H. Sullenberger	141,986	Aug. 19, 1873	527	174	4	195
Shaft-bending machine	A. J. Fraser	141,552	Aug. 5, 1873	123	39	4	145
Shaft-coupling	R. S. Cathcart	143,879	Oct. 21, 1873	458	153, 154	4	436
Shaft-coupling	J. Gibbins	145,100	Dec. 2, 1873	57	18	4	590
Shaft-coupling	W. J. Silver	142,288	Aug. 26, 1873	808	267	4	227
Shaft-coupling	J. M. Stone	141,296	July 29, 1873	895	294	4	117
Shaft-coupling	E. Swain	140,600	July 8, 1873	236	80	4	39
Shaft-eye, Tool for milling carriage	W. S. Ward	136,112	Feb. 18, 1873	664	217	3	205
Shaft-furnace for roasting ores	T. McGlew	140,837	July 15, 1873	440	150	4	63
Shaft-hanger	W. Bellis	138,119	Apr. 22, 1873	774	247	3	454
Shaft-hanger	B. E. Orton and W. Cavert	144,353	Nov. 4, 1873	151	50	4	490
Shaft-iron, Carriage	W. W. Knowles	138,753	May 13, 1873	267	83	3	529
Shaft, Tumbling	D. Snell	143,191	Sept. 23, 1873	758	261	4	336

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Shaft, Vehicle	S. P. Connor and P. D. Pfisterer	139, 117	May 20, 1873	594	187	3	569
Shaft, Vehicle	J. J. Dewey	145, 055	Dec. 2, 1873	13	5	4	587
Shaft, Vehicle	B. Schroeder	138, 442	Apr. 29, 1873	1,090	344	3	487
Shafts and well-tubes, Apparatus for lowering and sinking.	J. Chaudron	136, 031	Feb. 18, 1873	591	194	3	200
Shafts, Automatically-operating	F. B. Miles	142, 494	Sept. 2, 1873	158	51	4	254
Shafting, Bearing for	P. J. Hardy	145, 565	Dec. 16, 1873	482	158	4	648
Shafting-hanger	W. W. Carey	137, 593	Apr. 8, 1873	290	90	3	392
Shafting-hanger	J. Greenwood	142, 100	Aug. 26, 1873	653	215	4	215
Shafting, Manufacture of	C. F. Kneisley and W. Wensthoff	139, 165	May 20, 1873	644	201	3	573
Shafting, Process for casting bearings on	J. Miller	138, 176	Apr. 22, 1873	824	262	3	458
Shank-stiffener	W. N. Sprague	143, 389	Sept. 30, 1873	939	318	4	367
Sharpening-machine	J. H. Curran	146, 050	Dec. 30, 1873	935	301	4	707
Sharpening-machine	S. F. Emerson	141, 042	July 22, 1873	645	217	4	89
Sharpening-machine	J. P. Kealy and J. Rigney	140, 832	July 15, 1873	437	149	4	63
Sharpening-machine	H. B. Rorke	146, 098	Dec. 30, 1873	977	316	4	711
Shaving-mug	A. J. Furr and W. C. Knaus	144, 667	Nov. 18, 1873	432	146	4	536
Shawl-strap	T. R. Dunham	135, 530	Feb. 4, 1873	124	39, 40	3	137
Shawl-strap	J. B. Higgins	134, 748	Jan. 14, 1873	240	78	3	40
Shawl-strap	F. H. Willis	141, 024	July 22, 1873	631	212	4	88
Shearing-machine	J. K. Priest	144, 136	Oct. 28, 1873	697	231	4	465
Shears:							
<i>See</i> Counting-shears.							
Paper-shears.							
Pruning-shears.							
Rotary shears.							
Sheep-shears.							
Shears	A. Lapham	143, 454	Oct. 7, 1873	48	17	4	385
Shears and button-hole cutters combined	A. Swingle	138, 542	May 6, 1873	65	22	3	503
Sheathing-joint	N. G. Northup	138, 520	May 6, 1873	49	16	3	501
Sheave	P. Kavanagh	141, 564	Aug. 1, 1873	135	43	4	146
Shed, Portable stock	D. H. Yeiser	142, 069	Aug. 19, 1873	609	200	4	201
Shedding-mechanism	W. Gminder	135, 798	Feb. 11, 1873	381	123	3	169
Sheep-holder	S. Tucker	135, 175	Jan. 21, 1873	618	201	3	85
Sheep-shears	A. S. McWilliams	140, 292	June 24, 1873	787	250	3	704
Sheet-metal bending-machine	C. F. Brand	143, 558	Oct. 14, 1873	153	51	4	401
Sheet-metal bending-machine	W. F. Cozzens and W. H. Wiggin	141, 329	July 29, 1873	925	302	4	119
Sheet-metal bending-machine	W. F. Kistler	142, 921	Sept. 16, 1873	530	181	4	308
Sheet-metal bending-machine	J. Pearce	135, 150	Jan. 21, 1873	600	195	3	83
Sheet-metal boxes, Machine for cutting out and stamping up.	W. J. Gordon	145, 412	Dec. 9, 1873	335	112	4	625
Sheet-metal cutting and cupping die	C. F. Wilson and S. H. Miller	138, 721	May 6, 1873	229	71	3	516
Sheet-metal elbows, Construction of	L. Bancroft	137, 525	Apr. 8, 1873	231	71	3	387
Sheet-metal joints, Riveting	P. Ball	142, 979	Sept. 23, 1873	587	200	4	322
Sheet-metal, Machine for cold-rolling	J. Evans	135, 102	Jan. 21, 1873	556	181	3	80
Sheet-metal, Machine for cutting out planchets of	J. Lowe	138, 264	Apr. 29, 1873	930	{ 293 294 }	3	474
Sheet-metal pans, Machine for wiring	W. Foglesong	136, 986	Mar. 18, 1873	568	{ 189 190 }	3	309
Sheet-metal, Spinning articles of	F. J. Seymour	134, 939	Jan. 14, 1873	408	130	3	53
Sheet-metal tubing	S. R. Wilmot	137, 991	Apr. 15, 1873	643	203	3	434
Sheet-metal tubing	S. R. Wilmot	137, 992	Apr. 15, 1873	644	203	3	434
Sheet-metal vessels, Casting bottom on	R. J. Howdon	137, 204	Mar. 25, 1873	778	257	3	337
Sheet-metal ware, Handle for	J. Fallows	145, 286	Dec. 9, 1873	228	77	4	616
Sheet-metal ware, Handle for	J. W. Lamb	137, 848	Apr. 15, 1873	525	164	3	424
Sheet-metal ware, Machine for beading	C. E. Marchand	139, 681	June 10, 1873	222	71	3	643
Shelf, Revolving	J. Danner	143, 888	Oct. 21, 1873	466	156	4	436
Shell, Explosive	J. T. Senn	137, 491	Apr. 1, 1873	196	60	3	373
Shell, Process for cutting and shaping pearl	E. Carrington	134, 851	Jan. 14, 1873	330	105	3	47
Shelving bracket	J. V. Meigs	139, 408	May 27, 1873	872	279	3	509
Shield, Armpit	J. Sibley	142, 875	Sept. 16, 1873	493	168	4	304
Shingle-band notching-machine	C. E. McGregory	142, 033	Aug. 19, 1873	573	189	4	199
Shingle-machine	A. Anderson	142, 138	Aug. 26, 1873	686	226	4	217
Shingle-machine	S. M. King	139, 162	May 20, 1873	641	200	3	573
Shingle-machine	H. Peavey	135, 441	Feb. 4, 1873	45	14	3	131
Shingle-riving machine	C. Shelmandine	144, 292	Nov. 4, 1873	100	33, 34	4	486
Shingle-shaving machine	T. H. Carter	143, 877	Oct. 21, 1873	457	153	4	435
Shingles, Machine for bundling	R. Law	134, 753	Jan. 14, 1873	243	79	3	40
Shingling-bracket	L. W. Merriam	137, 312	Apr. 1, 1873	30	9	3	359
Shingling-bracket	L. W. Merriam	138, 425	Apr. 29, 1873	1,075	339	3	486
Ship and tank, Joint for iron	D. E. Merrick	142, 406	Sept. 2, 1873	76	25	4	248
Ship building, Iron	S. Holmes and W. M. Bowron	139, 789	June 10, 1873	330	102	3	651
Ship, Construction of	A. W. Thompson	136, 393	Mar. 4, 1873	36	13	3	248
Ship-frame, Adjustable templet for	A. Perrin	140, 071	June 17, 1873	579	183	3	679
Ship-hook blank, Die for making	C. E. Billings	138, 471	May 6, 1873	6	2	3	498
Ship-ventilating and steam-boiler heating apparatus	J. Thomas	140, 741	July 8, 1873	354	120	4	48
Ship's hull	E. C. Bélégue	145, 832	Dec. 23, 1873	718	236	4	680
Ship's rigging, Fair-leader for	J. J. Walton	145, 919	Dec. 23, 1873	798	261	4	686
Shipping-can shield	H. M. Smith	137, 627	Apr. 8, 1873	317	99	3	394
Shipping mechanism for machinery	F. N. Bixby	136, 483	Mar. 4, 1873	113	37	3	254
Shirt	O. Gowing	135, 424	Feb. 4, 1873	29	8	3	130
Shirt	S. S. Gray	145, 414	Dec. 9, 1873	337	113	4	625
Shirt	A. D. Marr	134, 909	Jan. 14, 1873	381	121	3	51
Shirt	G. C. Thomas	139, 933	June 17, 1873	462	145	3	669
Shirt	W. B. Watson	143, 108	Sept. 23, 1873	694	238	4	331
Shirt	J. Wieser	139, 937	June 17, 1873	466	146	3	669
Shirt-bosom	C. W. Jenks	135, 478	Feb. 4, 1873	79	25	3	134
Shirt-bosom	J. Pagan	140, 431	July 1, 1873	73	26	4	14
Shirt-bosom and lungs-protector, Combined	W. R. Trask	143, 205	Sept. 23, 1873	771	265	4	337
Shirt-bosom stretcher	E. Bassett	140, 000	June 17, 1873	514	163	3	673
Shirt-bosom support	G. F. Johnson	140, 373	July 1, 1873	32	11	4	11
Shirt-bosom support	I. L. Landis	139, 797	June 10, 1873	336	104	3	651
Shirt-bosom support	I. M. Post	140, 537	July 1, 1873	167	56	4	22
Shirt-bosom support and shoulder-brace	S. F. Long	140, 379	July 1, 1873	77	12	4	11
Shirt-front	T. M. Denham	142, 212	Aug. 26, 1873	746	246	4	222

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Shirt-front.....	J. A. Scriven.....	136, 771	Mar. 11, 1873	376	124	3	284
Shoe and leather-polisher.....	J. Day.....	134, 525	Jan. 7, 1873	20	7	3	9
Shoe-binding strip, Device for fastening ends of.....	C. E. Morrill.....	134, 763	Jan. 14, 1873	251	82	3	41
Shoe-fastener.....	J. Coykendall.....	138, 863	May 13, 1873	363	113	3	537
Shoe-fastening.....	S. Babbitt.....	145, 776	Dec. 23, 1873	675	221	4	676
Shoe-fastening.....	I. Banister.....	138, 117	Apr. 22, 1873	773	246	3	453
Shoe-fastening.....	M. Boch.....	139, 109	May 20, 1873	584	183	3	568
Shoe-fastening.....	G. L. Fitch and H. M. Jones.....	143, 445	Oct. 7, 1873	42	15	4	384
Shoe-fastening.....	C. Goldthwait.....	136, 649	Mar. 11, 1873	277	93	3	276
Shoe-fastening.....	G. B. Hart.....	143, 148	Sept. 23, 1873	722	248	4	333
Shoe-fastening.....	G. Merrill.....	134, 761	Jan. 14, 1873	250	82	3	40
Shoe-gores, Machine for gumming the edges of elastic.....	J. Walden and G. Platts.....	143, 798	Oct. 21, 1873	387	129	4	430
Shoe-holding jack.....	A. K. Washburn.....	143, 267	Sept. 30, 1873	830	285	4	358
Shoe-knife.....	A. J. Hall.....	145, 295	Dec. 9, 1873	236	79	4	617
Shoemaker's finishing-tool.....	W. Wilson and J. Foster.....	138, 063	Apr. 22, 1873	731	231	3	450
Shoemaker's pinchers.....	T. B. Shelly.....	143, 594	Oct. 14, 1873	181	61	4	404
Shoek-holder.....	J. I. Berry.....	142, 553	Sept. 9, 1873	216	70	4	271
Shoulder-brace.....	N. C. Burnap.....	139, 366	May 27, 1873	824	254	3	595
Shoulder-pad.....	L. Kyser.....	145, 661	Dec. 16, 1873	563	185	4	655
Shoulder-strap.....	J. C. Merritt.....	140, 061	June 17, 1873	572	181	3	678
Shovel: <i>See</i> Fire-shovel. Sifting-shovel. Snow-shovel.							
Shovel and spade.....	W. T. Wells and G. E. Morehouse.....	135, 954	Feb. 18, 1873	525	172	3	194
Shovel-handle.....	C. Pomeroy and J. D. Owen.....	143, 714	Oct. 14, 1873	297	97	4	412
Shovels, &c., Manufacture of.....	H. L. Lowman.....	142, 859	Sept. 16, 1873	480	164	4	303
Shovels, Manufacture of.....	E. A. Yerkes.....	140, 334	June 24, 1873	828	263	3	708
Show-card.....	A. H. Dixon.....	135, 636	Feb. 11, 1873	238	75	3	158
Show-case.....	A. Arnold and H. Mers.....	135, 505	Feb. 4, 1873	101	32	3	135
Show-case.....	D. D. Elder.....	140, 689	July 8, 1873	308	105	4	45
Shoe-knife.....	J. C. Ratelle.....	142, 942	Sept. 16, 1873	551	187	4	309
Shoe-lacing.....	J. Harding.....	139, 713	June 10, 1873	257	81	3	645
Shoe-lacing fastening.....	B. B. Choat.....	139, 871	June 17, 1873	407	127	3	665
Shoe, Lady's gaiter.....	H. C. Letsinger.....	140, 836	July 15, 1873	440	150	4	63
Shoe-nail.....	J. F. Paine.....	139, 327	May 27, 1873	795	.....	3	593
Shoe, Rubber.....	L. L. Hyatt and J. H. Canfield.....	140, 829	July 15, 1873	435	148	4	63
Shoe, Turned.....	W. Duchemin.....	140, 258	June 24, 1873	757	239	3	702
Shoe-upper gumming-machine.....	P. E. Clark.....	143, 275	Sept. 30, 1873	836	288	4	359
Shoe-uppers, Method of laying off.....	C. Glanville.....	144, 087	Oct. 28, 1873	659	217	4	462
Shoe-uppers, Machinery for goring.....	A. J. Goodwin.....	141, 642	Aug. 12, 1873	218	69	4	161
Shoe-uppers, Mode of cutting out.....	E. H. Thurston.....	136, 561	Mar. 4, 1873	188	61, 62	3	260
Shoes, Manufacture of.....	C. W. Green.....	142, 691	Sept. 9, 1873	330	110	4	280
Shoes, Manufacture of.....	C. W. Green.....	142, 692	Sept. 9, 1873	330	111	4	280
Shoes, Pattern for cutting the uppers of.....	G. Leinroth.....	144, 341	Nov. 4, 1873	140	47	4	490
Shoemakers, &c., Cutting-board for.....	C. E. Cooper.....	140, 680	July 8, 1873	302	101	4	44
Show-case.....	W. H. Reiff.....	135, 848	Feb. 11, 1873	426	138	3	172
Show-case.....	W. C. Spellman.....	140, 089	June 17, 1873	596	188	3	680
Show-case, Jeweler's.....	M. Martin and J. A. Studer.....	142, 575	Sept. 9, 1873	235	76	4	273
Shower-bath, Hand.....	D. Stirling.....	144, 156	Oct. 28, 1873	713	237	4	467
Shutter and door fastener.....	D. J. Moffitt.....	140, 064	June 17, 1873	575	182	3	679
Shutter and window fastener, Combined.....	W. T. Fry.....	145, 343	Dec. 9, 1873	278	93	4	620
Shutter-bowing device.....	T. Royer.....	137, 031	Mar. 18, 1873	609	201	3	313
Shutter, Corrugated-metallic rolling.....	A. Clark.....	137, 595	Apr. 8, 1873	291	90	3	392
Shutter-fastener.....	N. H. Byerley.....	135, 319	Jan. 28, 1873	769	248	3	109
Shutter-fastener.....	P. Keffer.....	145, 951	Dec. 30, 1873	849	276	4	700
Shutter-fastener.....	J. A. Morris.....	143, 585	Oct. 14, 1873	175	59	4	403
Shutter fastener and bower, Combined.....	R. Ruhlman.....	143, 189	Sept. 23, 1873	757	261	4	336
Shutter-fastening.....	E. D. Anderson.....	137, 647	Apr. 8, 1873	335	104	3	396
Shutter-fastening.....	J. P. Bush.....	143, 805	Oct. 21, 1873	397	131	4	430
Shutter-fastening.....	H. H. Miner.....	145, 888	Dec. 23, 1873	770	252	4	684
Shutter-fastening.....	A. J. Palmberg.....	143, 460	Oct. 7, 1873	52	18	4	385
Shutter-fastening.....	J. Parker.....	144, 126	Oct. 28, 1873	689	228	4	465
Shutter-fastening.....	H. A. Skinner.....	146, 028	Dec. 30, 1873	914	296	4	706
Shutter, Fire-proof.....	J. B. Cornell.....	141, 696	Aug. 12, 1873	265	86	4	164
Shutter, Fire-proof.....	A. Gottlieb.....	142, 563	Sept. 9, 1873	226	73	4	272
Shutter, Fire-proof.....	T. Hyatt.....	143, 156	Sept. 23, 1873	727	250	4	334
Shutter, Fire-proof.....	T. Hyatt.....	143, 157	Sept. 23, 1873	728	251	4	334
Shutter, Fire-proof.....	I. S. Mettler.....	140, 839	July 15, 1873	442	150	4	63
Shutter, Fire-proof.....	W. M. Vars.....	137, 158	Mar. 25, 1873	731	243	3	333
Shutter, Iron window.....	S. B. Munson, jr.....	140, 526	July 1, 1873	159	54	4	21
Shutter, Manufacture of corrugated-metal.....	A. Clark.....	137, 827	Apr. 15, 1873	505	158	3	422
Shutter, Metallic.....	W. H. Rodden.....	135, 246	Jan. 28, 1873	712	227	3	105
Shutter-worker.....	S. R. Foster.....	141, 267	July 29, 1873	872	285	4	115
Sbutter-worker.....	A. H. Gibbs.....	138, 879	May 13, 1873	377	118	3	538
Shutter-worker.....	J. W. Jedkins.....	143, 159	Sept. 23, 1873	729	251	4	334
Shutter-worker.....	L. Muller.....	143, 416	Oct. 7, 1873	20	8	4	382
Shutter-worker.....	F. W. Nichols.....	143, 994	Oct. 28, 1873	580	193	4	456
Shutter-worker.....	H. S. Phillips.....	140, 217	June 24, 1873	724	228	3	699
Shutter-worker.....	T. & C. T. Rowe.....	145, 688	Dec. 16, 1873	586	192	4	657
Shutter-worker and blind-operator, Combined.....	D. M. Leonard.....	143, 289	Sept. 30, 1873	846	291	4	360
Shuttle-binder.....	F. Rea.....	136, 384	Mar. 4, 1873	29	11	3	248
Shuttle-box mechanism.....	G. Crompton.....	142, 441	Sept. 2, 1873	105	34	4	251
Shuttle-box mechanism.....	J. Schrack.....	142, 736	Sept. 9, 1873	367	124	4	283
Shuttle-box operating mechanism.....	R. B. Goodyear.....	144, 089	Oct. 28, 1873	660	217	4	462
Sickle-bar, Mode of attaching pitman to.....	V. Cox.....	134, 519	Jan. 7, 1873	16	6	3	9
Sickle-sections, Apparatus for tempering.....	F. Meyer.....	145, 960	Dec. 30, 1873	856	278	4	701
Sidewalk, Composition.....	C. H. Howard.....	136, 919	Mar. 18, 1873	514	.....	3	305
Sidewalk-plate, Bridge and furrow.....	T. Hyatt.....	140, 707	July 8, 1873	325	110	4	46
Sidewalk-plate, Bridge and furrow.....	T. Hyatt.....	140, 708	July 8, 1873	326	110	4	46
Siding-hook.....	P. J. Coon.....	143, 436	Oct. 7, 1873	35	12	4	383
Siding-hook.....	J. F. Elliott.....	140, 904	July 15, 1873	503	169	4	68
Sieve.....	G. Wright.....	138, 976	May 13, 1873	452	142	3	545

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Sieve, Flour	J. T. Foster	137, 906	Apr. 15, 1873	575	180	3	428
Sieve, Grain	L. D. Carpenter	141, 917	Aug. 19, 1873	474	156	4	190
Sieve, Revolving	A. E. Neat	135, 355	Jan. 28, 1873	804	260	3	112
Sieve, Rotary	T. C. Strawn and W. C. Drum	138, 823	May 13, 1873	326	101	3	534
Sieve, Separator	B. & M. Miller	137, 145	Mar. 25, 1873	720	239	3	332
Sieves, Construction of metallic	R. J. Mann	135, 925	Feb. 18, 1873	503	164	3	193
Sieves, Construction of metallic	R. J. Mann	135, 926	Feb. 18, 1873	503	164	3	193
Sifter	A. Bardell	140, 869	July 15, 1873	467	158	4	65
Sifter	D. Pierce	143, 250	Sept. 30, 1873	815	280	4	357
Sifter, Ash	C. S. Collins	136, 902	Mar. 18, 1873	499	165	3	303
Sifter, Ash	L. Marsh	144, 466	Nov. 11, 1873	255	86	4	510
Sifter, Ash	S. Smith	137, 153	Mar. 25, 1873	726	241	3	333
Sifter, Coal	L. Tibbetts	141, 737	Aug. 12, 1873	297	97	4	167
Sifter, Flour	F. G. Ford	145, 410	Dec. 9, 1873	334	112	4	624
Sifter, Flour	G. Purple	144, 225	Nov. 4, 1873	48	14	4	482
Sifter, Sand	D. Brobston	142, 987	Sept. 23, 1873	594	202	4	323
Sifting-shovel	C. Keastner	144, 850	Nov. 25, 1873	601	204	4	560
Sifting-shovel, Ash	G. W. Dean	134, 647	Jan. 7, 1873	140	45	3	18
Sign	J. Harrison	141, 788	Aug. 12, 1873	349	115	4	171
Sign	W. Lambert	141, 281	July 29, 1873	882	289	4	116
Sign	E. M. May	136, 744	Mar. 11, 1873	356	117	3	283
Sign for moving vehicles	E. T. Clark and W. A. Lilliendahl	138, 228	Apr. 29, 1873	894	282	3	472
Signs on cloth, Painting	A. Stempel	144, 574	Nov. 11, 1873	348		4	518
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Fog-signal.							
Pneumatic-signal.							
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Railway-signal.							
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Signal recorder, Flash-light	W. Gustin	138, 498	May 6, 1873	25	9	3	500
Silk, Machine for doubling and twisting	H. A. Chapin	135, 522	Feb. 4, 1873	115	36, 37	3	137
Silk, Machine for spreading	J. Sault	141, 017	July 22, 1873	626	211	4	87
Silk, Reel for skeining	R. Simon	142, 177	Aug. 26, 1873	717	237	4	220
Silk-winder, Guide for	J. H. Campbell	137, 417	Apr. 1, 1873	122	40	3	367
Silver from other metals, Process of separating	C. Wiegand	145, 265	Dec. 2, 1873	204	.....	4	601
Silver ores, Treating	J. H. Selwyn	136, 102	Feb. 18, 1873	654	.....	3	204
Single-tree	L. Williams and W. S. McKinnie	136, 888	Mar. 18, 1873	487	161	3	303
Single-tree, Horse-car	J. Wills	137, 990	Apr. 15, 1873	643	203	3	434
Sink	H. Miller	145, 069	Dec. 2, 1873	27	9	4	587
Sink-drain	G. R. Moore	137, 788	Apr. 15, 1873	473	148	3	420
Sink, kitchen	F. Wytttenbach	136, 802	Mar. 11, 1873	403	{ 133 134 }	3	287
Sink-trap	N. Wright	136, 296	Feb. 25, 1873	838	271	3	231
Sinks and cesspools, Apparatus for emptying	F. J. Wildenthaler	141, 410	July 29, 1873	1, 008	327	4	125
Siphon	N. W. Paynter	135, 935	Feb. 18, 1873	511	166	3	193
Sizing compound	T. Gorrell	138, 147	Apr. 22, 1873	796	.....	3	455
Skate	E. H. Barney	137, 526	Apr. 8, 1873	332	71	3	387
Skate	C. W. Jenkins	145, 349	Dec. 9, 1873	282	94	4	620
Skate	J. T. Larkin	137, 780	Apr. 15, 1873	467	146	3	419
Skate	W. Strasser	139, 628	June 3, 1873	157	53	3	622
Skate	J. A. Whelpley	144, 718	Nov. 18, 1873	474	161	4	540
Skate, Fastening	G. W. Barlow	145, 551	Dec. 16, 1873	473	154	4	647
Skate-heel plate	G. Havell	137, 678	Apr. 8, 1873	365	113	3	398
Skate-roller	O. H. Dodge	136, 711	Mar. 11, 1873	327	108	3	280
Skate-roller	W. P. Gregg	138, 018	Apr. 22, 1873	685	216	3	446
Skins and leather, Machine for graining, pebbling, and softening	N. O. Lounsberry	135, 350	Jan. 28, 1873	800	258	3	112
Skins, Machine for pebbling and graining wet	N. O. Lounsberry	140, 633	July 8, 1873	264	89, 90	4	41
Skins, Machine for staking, glassing, and perching	W. A. Watson	139, 442	May 27, 1873	898	289	3	601
Skins, Machinery for removing dirt from	C. Turner	143, 733	Oct. 14, 1873	313	104	4	414
Skipping-rod	J. Murphy	140, 298	June 24, 1873	792	252	3	705
Skirt	W. S. Taylor	143, 198	Sept. 23, 1873	762	263	4	337
Skirt, Hoop and train	L. Guelle	136, 434	Mar. 4, 1873	69	24	3	251
Skirt, Printing and embossing machine	H. J. Davies	137, 184	Mar. 25, 1873	757	250	3	335
Skirt-protector	J. Jenkinson	144, 617	Nov. 18, 1873	392	131	4	533
Skirt-protector	G. E. King	145, 429	Dec. 9, 1873	350	117	4	626
Skirt-protector	J. C. Livermore	143, 361	Sept. 30, 1873	918	311	4	365
Skirt, Skeleton	P. Lippmann	144, 911	Nov. 25, 1873	646	220	4	565
Skylight	G. B. Clarke	135, 888	Feb. 18, 1873	475	153	3	190
Skylight	G. Hayes	143, 149	Sept. 23, 1873	723	249	4	333
Skylight	G. Hayes	143, 150	Sept. 23, 1873	724	249	4	333
Skylight	G. Hayes	143, 151	Sept. 23, 1873	724	249	4	334
Skylight-bar	C. Sellman	140, 650	July 8, 1873	278	94	4	42
Skylight-cover	G. Hayes	143, 152	Sept. 23, 1873	725	249	4	334
Skylight, Metallic	G. E. Dayton	137, 832	Apr. 15, 1873	511	160	3	423
Skylight-pane	O. F. Saunders	141, 820	Aug. 12, 1873	375	123	4	173
Skylight turret and conservatory	G. Hayes	143, 153	Sept. 23, 1873	725	250	4	334
Slag-iron, &c., Apparatus for granulating	C. Wood	143, 485	Oct. 7, 1873	74	25	4	386
Slate	C. Drasser	136, 591	Mar. 11, 1873	229	77	3	273
Slate	E. W. Roberts	135, 158	Jan. 21, 1873	605	197	3	84
Slate and blackboard rubber	H. W. Holly	144, 764	Nov. 18, 1873	514	174	4	543
Slate-cleaner	F. Hickman	136, 058	Feb. 18, 1873	615	202	3	202
Slate-dressing machine	F. Shenton	134, 773	Jan. 14, 1873	260	85	3	41
Slate-frame	A. H. Jocelyn	144, 104	Oct. 28, 1873	672	222	4	463
Slate-frame finishing machine	J. H. & G. S. Coffin	138, 005	Apr. 22, 1873	673	213	3	446
Slate-frame, Transparent	W. F. Boucher	135, 315	Jan. 28, 1873	765	247	3	109
Slate, Office	C. Boyle	143, 804	Oct. 21, 1873	396	131	4	430
Slate-washer	D. W. Leet and W. C. Shields	138, 662	May 6, 1873	173	55	3	511
Slate-washer	J. G. Murphy	144, 280	Nov. 4, 1873	92	30	4	485
Slate washer	W. Westlake	138, 218	Apr. 22, 1873	863	273	3	461

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Slating nails.....	T. O'Gara.....	134,560	Jan. 7, 1873	55	17	3	11
Slaughtering-apparatus.....	M. Brenner.....	143,401	Oct. 7, 1873	3	1	4	381
Sled.....	W. Nevers.....	136,750	Mar. 11, 1873	360	119	3	283
Sled, Bob.....	J. W. Doty.....	142,902	Sept. 16, 1873	515	175	4	306
Sled, Boy's.....	S. D. Mott.....	143,090	Sept. 23, 1873	679	234	4	330
Sled-brake.....	P. Gable.....	142,623	Sept. 9, 1873	274	90	4	276
Sled-brake.....	J. Slater.....	139,621	June 3, 1873	153	51	3	621
Sled, Reach for bob.....	J. W. Smith.....	139,336	May 27, 1873	801	255	3	594
Sleigh.....	A. A. Abbott.....	145,323	Dec. 9, 1873	263	88	4	619
Sleigh.....	A. D. De Lano.....	144,746	Nov. 18, 1873	499	169	4	542
Sleigh.....	S. Morrill.....	135,660	Feb. 11, 1873	257	81	3	160
Sleigh-brake.....	T. H. Bromley.....	144,949	Nov. 25, 1873	678	230	4	567
Sleigh-brake.....	F. A. Kirch.....	136,839	Mar. 18, 1873	447	148	3	300
Sleigh-rave and fender, Combined.....	S. M. Stewart.....	137,804	Apr. 15, 1873	488	152	3	421
Sleigh-runner.....	C. Chenette.....	134,977	Jan. 21, 1873	452	145	3	72
Sleigh-runner.....	J. W. & E. W. Karn.....	139,396	May 27, 1873	858	274	3	598
Sleigh-shaft bell.....	A. E. Taylor.....	141,674	Aug. 12, 1873	248	79	4	163
Slicer, Vegetable.....	N. Botsford.....	144,596	Nov. 18, 1873	373	126	4	532
Slicing-machine for dried beef.....	A. Iske.....	144,206	Nov. 4, 1873	33	10	4	481
Sliding-gauge.....	J. Eaton.....	142,449	Sept. 2, 1873	114	36	4	251
Sling for raising animals.....	F. Hohorst.....	136,059	Feb. 18, 1873	616	202	3	202
Slop-jar.....	W. S. Potwin.....	135,937	Feb. 18, 1873	512	167	3	193
Slatting and key-seat machine.....	J. H. Cranston.....	134,857	Jan. 14, 1873	335	107	3	47
Smelting-furnace.....	B. M. Smith.....	137,493	Apr. 1, 1873	197	60, 61	3	373
Smelting-furnace, Ore.....	E. Balbach, jr.....	141,912	Aug. 19, 1873	471	154	4	190
Smelting-furnace, Ore.....	J. Neville.....	138,428	Apr. 29, 1873	1,077	340	3	486
Smoke-burning furnace.....	S. A. Ford.....	135,420	Feb. 4, 1873	25	7	3	129
Smoke-burning furnace.....	S. A. Ford.....	143,004	Sept. 23, 1873	609	{ 206 207 }	4	324
Smoke-burning furnace.....	C. McGinness and W. Naylor.....	141,574	Aug. 5, 1873	141	45	4	147
Smoke-consuming apparatus.....	W. R. W. Smith.....	145,022	Nov. 25, 1873	741	250	4	573
Smoke-stack.....	T. F. Conklin.....	145,279	Dec. 9, 1873	219	75	4	615
Smoking-pipe.....	W. H. Morris.....	140,940	July 15, 1873	540	180	4	71
Smoking-pipes, Machine for molding clay.....	H. E. Merrill.....	141,230	July 29, 1873	834	{ 272 273 }	4	112
Smoking-tube.....	A. Brear.....	136,695	Mar. 11, 1873	313	104	3	279
Smoking-tube.....	A. Gedies.....	140,360	July 1, 1873	22	7	4	10
Smoothing and fluting iron and holder.....	J. Hewitt.....	135,335	Jan. 28, 1873	787	255	3	111
Smoothing-iron.....	A. S. Mann.....	141,880	Aug. 19, 1873	445	145	4	188
Smoothing-iron.....	L. L. Mivelar.....	136,170	Feb. 25, 1873	730	235	3	222
Smoothing-iron.....	A. B. Wimpenny.....	136,401	Mar. 4, 1873	44	16	3	249
Smut-mill.....	A. D. Ash.....	136,356	Mar. 4, 1873	3	1	3	245
Smut-mill.....	H. A. Barnard.....	144,050	Oct. 28, 1873	627	207	4	460
Smut-mill.....	J. Hinzey.....	142,465	Sept. 2, 1873	129	42	4	252
Smut-mill case, Metallic fabric for.....	H. S. Jewell.....	140,199	June 24, 1873	711	224	3	697
Snap-hook.....	J. C. Covert.....	143,332	Sept. 30, 1873	885	303	4	363
Snap-hook.....	G. M. Hubbard.....	136,728	Mar. 11, 1873	342	113	3	282
Snap-hook.....	W. W. Kitch.....	135,344	Jan. 28, 1873	795	257	3	111
Snap-hook.....	O. B. North.....	140,531	July 1, 1873	161	55	4	21
Snap-hook.....	S. Reynolds.....	138,935	May 13, 1873	421	132	3	542
Snow and ice from roadways, Machine for removing.....	C. G. Waterbury.....	145,822	Dec. 23, 1873	709	233	4	679
Snow and ice from roadways of streets, Machine for removing.....	C. G. Waterbury.....	144,488	Nov. 11, 1873	274	93	4	512
Snow from railways, Device for removing.....	J. A. Bryant.....	145,623	Dec. 16, 1873	531	174	4	652
Snow from roadways, Machine for removing.....	G. Hart.....	145,566	Dec. 16, 1873	483	158	4	648
Snow, Machine for clearing streets of.....	W. E. Musgrove.....	143,176	Sept. 23, 1873	743	256	4	335
Snow, Machine for clearing streets of.....	R. A. Shinn.....	143,470	Oct. 7, 1873	60	21	4	385
Snow-melting machine.....	J. Mullaly.....	136,853	Mar. 18, 1873	458	152	3	301
Snow-melting machine.....	J. Mullaly.....	136,854	Mar. 18, 1873	459	152	3	301
Snow-melting machine.....	J. Mullaly.....	136,931	Mar. 18, 1873	523	172	3	305
Snow-melting machine.....	J. Mullaly.....	136,932	Mar. 18, 1873	523	173	3	305
Snow-melting machine.....	J. Mullaly.....	137,018	Mar. 18, 1873	599	198	3	312
Snow-melting machine.....	J. Mullaly.....	137,019	Mar. 18, 1873	599	198	3	312
Snow-melting machine.....	J. Mullaly.....	137,020	Mar. 18, 1873	600	199	3	312
Snow-melting machine.....	J. Mullaly.....	143,834	Oct. 21, 1873	421	140	4	433
Snow-ram, Railway.....	W. C. A. Frerichs.....	134,595	Jan. 7, 1873	90	28	3	14
Snow-shovel.....	H. C. Cole.....	138,076	Apr. 22, 1873	741	235	3	451
Snow-shovel.....	E. Hunter.....	137,001	Mar. 18, 1873	582	194	3	310
Snuff-packing apparatus.....	A. H. Pfloek.....	138,281	Apr. 29, 1873	946	299	3	476
Soap and other materials, Apparatus for mixing.....	C. J. Schultze.....	134,706	Jan. 7, 1873	195	63	3	22
Soap-crutching machine.....	S. Strunz.....	138,953	May 13, 1873	435	136	3	543
Soap-cutting machine.....	J. Seibert.....	144,481	Nov. 11, 1873	269	91	4	512
Soap-cutting machine.....	J. B. Uitsch.....	145,319	Dec. 9, 1873	259	86	4	618
Soap, Manufacture of.....	F. M. Pleins.....	140,789	July 15, 1873	397	.....	4	60
Soap, Manufacture of.....	R. P. Thomas.....	138,712	May 6, 1873	219	.....	3	515
Soap, Putting up alkalies for making.....	J. H. Wylé.....	143,430	Oct. 7, 1873	31	.....	4	383
Soap, Surface-coating to hard.....	W. V. Wallace.....	143,601	Oct. 14, 1873	187	.....	4	404
Sod-cutter and land-roller, Combined.....	C. Leavitt.....	135,719	Feb. 11, 1873	311	99	3	164
Soda and mineral-water fountain.....	W. Gee.....	144,086	Oct. 28, 1873	658	217	4	462
Soda-apparatus.....	M. S. Andrews.....	135,617	Feb. 11, 1873	221	69	3	157
Soda, Apparatus for extracting nitrate of.....	R. F. Fairlie.....	140,908	July 15, 1873	505	170	4	69
Soda-fountain.....	W. H. Russel.....	135,940	Feb. 18, 1873	515	168	3	193
Soda-fountain draft-tube.....	R. B. Robbins.....	135,010	Jan. 21, 1873	484	155	3	74
Soda-fountain draft-tube.....	R. B. Robbins.....	142,513	Sept. 2, 1873	171	56	4	255
Soda-fountain sirup-device.....	W. Gee.....	134,880	Jan. 14, 1873	355	113	3	49
Soda-fountains, Apparatus for charging.....	J. C. Kennedy.....	145,503	Dec. 16, 1873	420	138	4	643
Soda-fountains, Attachment for.....	O. F. Stedman.....	144,234	Nov. 4, 1873	58	18	4	483
Soda or alkali, Package for caustic.....	H. B. Hall.....	139,955	June 17, 1873	478	150	3	670
Soda, Process and apparatus for manufacture of carbonate of.....	E. Solvay.....	136,463	Mar. 4, 1873	94	32, 33	3	253
Soda-water apparatus.....	J. Matthews.....	137,702	Apr. 8, 1873	386	119	3	400
Soda-water apparatus.....	J. W. Tufts.....	136,345	Feb. 25, 1873	881	283	3	234
Soda-water apparatus, Beer attachment for.....	W. R. Cady.....	138,002	Apr. 22, 1873	671	212	3	445
Soda-water apparatus, Device for dispensing sirup in.....	J. Matthews.....	141,229	July 29, 1873	833	272	4	111

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Soda-water, &c., Apparatus for dispensing	J. Matthews	141, 154	July 22, 1873	747	{ 246 247	{ 4	97
Soda-water cooler	W. Gee	141, 133	July 22, 1873	727	241	4	96
Soda-water dispensing-apparatus	W. Gee	137, 195	Mar. 25, 1873	770	254	3	336
Soda-water, &c., Draft-cock for	J. D. O'Donnell	143, 777	Oct. 21, 1873	370	122	4	428
Soda-water draft-tube	O. Zwietsch	144, 646	Nov. 18, 1873	420	141	4	535
Soda-water fountain	A. D. Puffer	139, 734	June 10, 1873	278	87	3	647
Soda-water fountain	F. W. Weisebrock	145, 139	Dec. 2, 1873	96	31	4	593
Soda-water tumbler-holder	J. Matthews	144, 913	Nov. 25, 1873	648	220	4	565
Sofa	W. R. Conger	138, 860	May 13, 1873	361	112	3	537
Sofa	J. I. Rand and J. F. McSherry	140, 306	June 24, 1873	799	254	3	705
Sofa-bottom, &c.	I. Mason	137, 784	Apr. 15, 1873	470	147	3	419
Sofa, chair, &c.	A. S. Newhouse	145, 811	Dec. 23, 1873	701	230	4	678
Solder, Flux for	C. E. Yager	139, 490	June 3, 1873	43	.....	3	612
Solder for sealing fruit and oyster cans, Preparation of	E. Morris	140, 840	July 15, 1873	443	151	4	64
Soldering-apparatus	C. B. Koons	137, 217	Mar. 25, 1873	790	261	3	338
Soldering-compound	C. Cox	139, 297	May 27, 1873	774	.....	3	591
Soldering-furnace	J. Day	143, 126	Sept. 23, 1873	707	242	4	332
Soldering-furnace	J. A. Frey	138, 626	May 6, 1873	139	45	3	509
Soldering-furnace	W. S. Potwin	141, 889	Aug. 19, 1873	451	147	4	189
Soldering-iron	G. F. Blaisse and J. Brannen	139, 537	June 3, 1873	78	27	3	615
Soldering-iron	A. H. Burnham	138, 732	May 13, 1873	249	77	3	527
Soldering-iron	J. D. Norton	134, 923	Jan. 14, 1873	394	125	3	52
Soldering-irons, Furnace for heating	J. Burgess	145, 784	Dec. 23, 1873	681	223	4	677
Soldering-irons, Tinner's stove for heating	C. A. Buttles	137, 890	Apr. 15, 1873	558	175	3	427
Soldering-irons, Vapor stove for heating	D. Berkey	134, 583	Jan. 7, 1873	79	25	3	13
Soldering-machine	W. D. Brooks	137, 888	Apr. 15, 1873	556	174	3	426
Soldering-machine	W. D. Brooks	139, 539	June 3, 1873	80	28	3	615
Soldering-machine	W. D. Brooks	139, 763	June 10, 1873	307	95	3	649
Soldering-machine	W. D. Brooks	140, 679	July 8, 1873	301	101	4	44
Soldering-machine	E. Morris and W. H. Kimball	136, 748	Mar. 11, 1873	359	118	3	283
Soldering-machine	J. F. Spence	142, 956	Sept. 16, 1873	563	191	4	310
Soldering-machine, Tin-can	J. Redheffer	135, 847	Feb. 11, 1873	425	138	3	172
Soldering-tool	L. Cutting	136, 367	Mar. 4, 1873	12	5	3	246
Soldering-tool	L. Cutting	145, 156	Dec. 2, 1873	108	36	4	594
Soldering-tool	R. J. Hollingsworth	140, 042	June 17, 1873	553	175	3	677
Soldering-tool	J. Sears	137, 244	Mar. 25, 1873	813	267	3	339
Soldering-tool	W. H. Wight	135, 025	Jan. 21, 1873	498	160	3	75
Sole-buffing machinery, Cylinder for	J. Howe	136, 727	Mar. 11, 1873	341	113	3	282
Sole-burnishing machine, Boot and shoe	G. C. Hawkins	136, 322	Feb. 25, 1873	858	276	3	232
Sole-channeling machine	C. C. Ballou	141, 025	July 22, 1873	631	213	4	88
Sole-channeling machine	H. S. Vrooman	139, 637	June 3, 1873	169	56	3	623
Sole-edge-bending machinery, Boot and shoe	B. H. Hadley	140, 035	June 17, 1873	547	173	3	676
Sole-edge-finishing machinery, Boot and shoe	H. P. Fairfield and W. W. Mes- ser, jr.	143, 682	Oct. 14, 1873	263	87	4	410
Sole-edge-finishing machinery, Boot and shoe	H. F. Wheeler	141, 843	Aug. 12, 1873	395	129	4	175
Sole-edge of boot and shoe, Machinery for burnishing	J. and J. Beasley, jr.	141, 983	Aug. 19, 1873	524	173	4	195
Sole-edge of boot and shoe, Machinery for finishing	C. M. Chase	141, 997	Aug. 19, 1873	537	{ 177 178	{ 4	196
Sole-edge of boot and shoe, Machinery for trimming	R. C. Lambert	142, 029	Aug. 19, 1873	568	188	4	198
Sole-edge setting-tool	J. H. Morrison	136, 087	Feb. 18, 1873	640	209	3	203
Sole-edge trimming-tool	I. R. Rogers	136, 096	Feb. 18, 1873	648	212	3	204
Sole for boots and shoes, Inner	J. Gascoigne	142, 332	Sept. 2, 1873	10	4	4	243
Sole for boots and shoes, Rubber	D. E. Hayward	142, 161	Aug. 26, 1873	704	232	4	219
Sole-nailing machine	A. S. Libby	138, 666	May 6, 1873	177	56	3	512
Sole-nailing machine, Nail-carrier for	A. S. Libby	135, 824	Feb. 11, 1873	408	132	3	171
Sole-pressing machine	F. W. Coy	136, 706	Mar. 11, 1873	322	107	3	280
Sole-pressing machine	C. M. Hayden	139, 577	June 3, 1873	114	38	3	618
Sole pressing-machine, Boot and shoe	G. F. Seaver, E. W. Southworth, and J. M. Anthony.	137, 245	Mar. 25, 1873	814	267	3	339
Sole trimming and burnishing machine, Shoe	B. J. Tayman	140, 601	July 8, 1873	237	80	4	39
Sole-trimming machine	B. Gallagher and J. Coyle	137, 066	Mar. 25, 1873	652	216	3	327
Sole trimming-machine, Boot and shoe	B. J. Tayman	136, 790	Mar. 11, 1873	393	130	3	286
Soles, Die for molding shoe	S. B. Fuller	141, 216	July 29, 1873	823	269	4	111
Soles, Forming boot and shoe	C. H. Brigham	142, 893	Sept. 16, 1873	508	173	4	306
Soles, Machine for burnishing and trimming the edge of boot and shoe.	J. W. Maloy	135, 229	Jan. 28, 1873	692	222	3	103
Soles, Machine for burnishing the edge of boot and shoe.	J. and J. Beasley, jr.	141, 984	Aug. 19, 1873	525	174	4	195
Soles, Machine for skiving and feather-edging boot and shoe.	E. P. Pierce	142, 507	Sept. 2, 1873	167	54	4	255
Soles, Machine for trimming and burnishing boot and shoe.	L. Coté	135, 694	Feb. 11, 1873	291	92	3	162
Soles, Machine for trimming the edge of boot and shoe	J. W. Maloy	136, 080	Feb. 18, 1873	634	208	3	203
Soles, Machine for shaping boot and shoe	J. B. Johnson	141, 058	July 22, 1873	655	{ 221 222	{ 4	90
Soles, Mode of finishing shoe	B. S. Bryant	140, 241	June 24, 1873	743	234	3	700
Soles of boots and shoes, Tool for marking edges of	J. W. Dodge	144, 515	Nov. 11, 1873	294	99	4	514
Soles to boots and shoes, Nail for attaching	W. Wickersham	136, 014	Feb. 18, 1873	578	190	3	199
Soles to uppers, Uniting boot and shoe	W. Strasser	140, 964	July 15, 1873	563	188	4	73
Soling-machine, Spool for boot and shoe	L. Goddu	143, 137	Sept. 23, 1873	714	245	4	333
Sower, Fertilizing attachment to seed	H. Springer	141, 606	Aug. 5, 1873	171	55	4	149
Sower, Hand seed	G. Hall	139, 785	June 10, 1873	326	101	3	651
Sower, planter, and cultivator	S. D. Hopkins	144, 099	Oct. 28, 1873	667	220	4	463
Sower, Plaster	G. Sweet	140, 317	June 24, 1873	811	256	3	706
Sower, Seed	B. Morse	145, 520	Dec. 16, 1873	444	145	4	645
Spade and fork combined	H. Stone	140, 855	July 15, 1873	456	155	4	65
Spading-machine	J. G. Jones	145, 737	Dec. 23, 1873	642	209	4	673
Spark-arrester	R. Ash	141, 195	July 29, 1873	799	261	4	109
Spark-arrester	J. Bardsley	144, 049	Oct. 28, 1873	626	207	4	459
Spark-arrester	A. W. Cram	139, 659	June 10, 1873	201	66	3	641
Spark-arrester	J. E. Dustin	142, 904	Sept. 16, 1873	517	176	4	306
Spark-arrester	W. D. Farrand	141, 869	Aug. 19, 1873	435	142	4	187
Spark-arrester	J. L. Ferris	144, 081	Oct. 28, 1873	653	215	4	462

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Spark-arrester.....	E. Fontaine.....	139,053	May 20, 1873	531	168	3	564
Spark-arrester.....	W. F. Grassler.....	137,438	Apr. 1, 1873	142	46	3	368
Spark-arrester.....	J. Hughes.....	144,275	Nov. 4, 1873	88	29	4	485
Spark-arrester.....	T. D. Kendrick.....	139,509	June 3, 1873	57	19	3	613
Spark-arrester.....	E. Lannay.....	139,399	May 27, 1873	864	276	3	598
Spark-arrester.....	H. C. Parmalee and S. M. Jones.....	145,232	Dec. 2, 1873	175	60	4	599
Spark-arrester.....	J. Richards and J. Meehl.....	143,931	Oct. 21, 1873	498	168	4	439
Spark-arrester.....	J. W. Seigh.....	145,596	Dec. 16, 1873	507	167	4	650
Spark-arrester.....	G. Swenson.....	144,932	Nov. 25, 1873	663	225	4	566
Spark-arrester.....	J. White.....	142,308	Aug. 26, 1873	824	273	4	229
Spark-arrester.....	M. Zech.....	141,531	Aug. 5, 1873	104	32	4	143
Spark-arrester and conductor.....	E. Shoemaker.....	144,637	Nov. 18, 1873	408	137	4	534
Spark-arrester and extinguisher, Locomotive.....	J. W. Gray.....	139,002	May 20, 1873	490	155	3	561
Spark-arrester, Locomotive.....	M. Brassill.....	143,664	Oct. 14, 1873	243	82	4	409
Spark-arrester, Locomotive.....	J. Gibbs.....	137,134	Mar. 25, 1873	711	236	3	332
Spark-arrester, Locomotive.....	M. B. Mason.....	142,251	Aug. 26, 1873	779	257	4	225
Speaking-tube.....	C. A. Fredericks.....	135,421	Feb. 4, 1873	26	8	3	129
Speaking-tube.....	A. Rankin.....	140,539	July 1, 1873	168	57	4	22
Spectacles.....	J. King.....	134,897	Jan. 14, 1873	370	118	3	50
Spectacles, Temple for.....	G. W. Meigs.....	139,909	June 17, 1873	444	138	3	667
Speed-gage.....	J. W. Osborne.....	139,184	May 20, 1873	658	{ 206 207 }	{ 3 3 }	574
Speed in machinery, Mode of changing.....	W. H. Wilson.....	140,751	July 8, 1873	363	123	4	49
Speed in machinery, Regulating.....	L. H. Olmsted.....	142,504	Sept. 2, 1873	164	53	4	255
Speed of machinery, Changing.....	A. Betts.....	144,499	Nov. 11, 1873	283	96	4	513
Speed-regulator.....	G. W. Parker.....	138,522	May 6, 1873	50	17	3	501
Speeder.....	G. W. Olney.....	139,603	June 3, 1873	138	45	3	620
Spice-box.....	E. Norton.....	139,688	June 10, 1873	228	73	3	643
Spice-box.....	J. Sears.....	141,595	Aug. 5, 1873	158	51	4	148
Spiegeleisen, Manufacture of.....	E. Baker.....	139,649	June 10, 1873	193	.....	3	641
Spike.....	S. Redfern.....	139,972	June 17, 1873	490	155	3	671
Spike.....	G. N. Sanders, jr.....	142,284	Aug. 26, 1873	805	266	4	227
Spike.....	G. N. and G. N. Sanders, jr.....	140,844	July 15, 1873	445	152	4	64
Spike-bar.....	G. Douglass.....	144,074	Oct. 28, 1873	647	213	4	461
Spike-extracting machine.....	J. Barsalouse and R. Graham.....	138,988	May 20, 1873	476	150	3	560
Spike-extractor.....	A. F. Jackson.....	140,371	July 1, 1873	31	10	4	10
Spike-extractor.....	G. A. Prescott and J. Barsaloux.....	136,093	Feb. 18, 1873	646	211	3	204
Spike-machine.....	W. A. D. Bowman.....	141,754	Aug. 12, 1873	313	102	4	169
Spike-machine.....	T. O'Connor.....	137,709	Apr. 8, 1873	392	122	3	400
Spike-making machine.....	D. Eynon.....	137,427	Apr. 1, 1873	131	43	3	367
Spike-pointing machine.....	J. Waldron and D. G. Moore.....	138,058	Apr. 22, 1873	727	230	3	450
Spindle: <i>See</i> Knob-spindle. Mill-spindle. Millstone-spindle. Spinning-frame spindle. Spinning-machine spindle.							
Spindle.....	L. C. Crocker.....	144,067	Oct. 28, 1873	642	211	4	461
Spindle-bearings.....	J. Taylor, jr., and J. Prest.....	135,295	Jan. 28, 1873	749	241	3	108
Spindle-bolster.....	J. Barnes.....	135,960	Feb. 18, 1873	530	175	3	195
Spindle-bolster.....	G. Richardson.....	137,239	Mar. 25, 1873	808	266	3	339
Spindle-bolster.....	G. Richardson.....	143,785	Oct. 21, 1873	378	125	4	429
Spindle, Lubricating.....	J. Goulding.....	136,504	Mar. 4, 1873	132	43	3	256
Spindle-step.....	J. J. Henry.....	137,443	Apr. 1, 1873	147	48	3	369
Spinning and twisting machine.....	H. A. Chapin.....	144,191	Nov. 4, 1873	18	5	4	480
Spinning-frame.....	G. Draper.....	134,864	Jan. 14, 1873	342	109	3	47
Spinning-frame, Device for stopping the spindle of.....	H. T. Potter.....	138,929	May 13, 1873	416	130	3	542
Spinning-frame, Drawing mechanism for.....	R. Ackroyd and W. Cockcroft.....	135,616	Feb. 11, 1873	221	69	3	157
Spinning-frame spindle and bobbin.....	R. Gursed.....	134,535	Jan. 7, 1873	30	10	3	9
Spinning-frame, spindle-bolster, and step.....	G. Draper.....	134,863	Jan. 14, 1873	340	109	3	47
Spinning-frame twist-regulating device.....	C. Martin.....	140,056	June 17, 1873	566	{ 178 179 }	{ 3 3 }	678
Spinning-jack, Self-acting.....	J. E. Knight.....	137,777	Apr. 15, 1873	465	145	3	419
Spinning-jack, Self-acting.....	A. Paul.....	137,386	Apr. 1, 1873	93	31	3	364
Spinning-jack, Self-acting.....	J. Shaw.....	134,567	Jan. 7, 1873	61	18, 19	3	12
Spinning-jack winding mechanism.....	J. Shaw.....	135,852	Feb. 11, 1873	428	139	3	173
Spinning-machine.....	H. Ashworth.....	139,755	June 10, 1873	299	92	3	648
Spinning-machine.....	C. S. M., and H. M. Williams.....	145,322	Dec. 9, 1873	261	87, 88	4	619
Spinning-machine bobbin.....	P. Laffin.....	142,245	Aug. 26, 1873	775	255	4	225
Spinning-machine condensing-tube.....	J. Good.....	143,508	Oct. 7, 1873	93	33	4	388
Spinning-machine quill-bobbin.....	D. Bass, jr.....	139,652	June 10, 1873	196	64	3	641
Spinning-machine spindle.....	W. T. Carroll.....	144,601	Nov. 18, 1873	377	127	4	532
Spinning-machine spindle.....	W. G. Perry.....	137,236	Mar. 25, 1873	805	265	3	339
Spinning-machine spindle.....	W. G. Perry.....	145,009	Nov. 25, 1873	729	246	4	572
Spinning-machine spindle.....	D. H. Rice.....	134,771	Jan. 14, 1873	259	85	3	41
Spinning-machine spindle.....	D. H. Rice.....	135,939	Feb. 18, 1873	513	{ 167 168 }	{ 3 3 }	193
Spinning-machine spindle-bolster.....	J. Birkenhead.....	141,751	Aug. 12, 1873	310	101	4	168
Spinning-machine spindle-bolster.....	B. H. Jenks.....	141,440	Aug. 5, 1873	26	9	4	137
Spinning-machine spindle-bolster.....	B. H. Jenks.....	141,141	Aug. 5, 1873	27	9	4	137
Spinning-machine spindle-bolster.....	C. F. Wilson.....	135,190	Jan. 21, 1873	630	206	3	86
Spinning-machine spindle-step.....	C. F. Wilson.....	135,189	Jan. 21, 1873	630	205	3	86
Spinning-machines, Roller-clearer for.....	C. B. Brown.....	141,031	July 22, 1873	636	214	4	88
Spinning-machines, Spindle-whirl for.....	M. A. Furbush.....	146,059	Dec. 30, 1873	943	304	4	708
Spinning-machinery, Electrical stop for.....	H. A. Chapin.....	138,993	May 20, 1873	480	152	3	560
Spinning-mule.....	J. J. Dewey.....	139,051	May 20, 1873	527	166	3	564
Spinning-mule.....	T. Houlding.....	145,569	Dec. 16, 1873	485	159	4	648
Spinning-mule.....	M. Moffatt.....	140,587	July 8, 1873	225	76	4	38
Spinning-mule.....	T. H. Rushton and R. Touge.....	139,737	June 10, 1873	282	87, 88	3	647
Spinning-mule brake.....	J. W. Whitehead.....	134,960	Jan. 14, 1873	424	135	3	54
Spinning-mule, Self-acting.....	T. McGovern.....	138,511	May 6, 1873	38	13, 14	3	500
Spinning-mule, Self-acting.....	A. Metcalf and W. Gibbons.....	134,915	Jan. 14, 1873	386	123	3	51
Spinning-mule, Self-acting.....	A. Paul.....	135,008	Jan. 21, 1873	482	155	3	74
Spinning-mule, Self-acting.....	G. O. Wickers.....	137,334	Apr. 1, 1873	55	16	3	361
Spinning-ring.....	J. W. Wattles.....	144,004	Oct. 28, 1873	588	195	4	456

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Spinning-ring, Process of repairing	H. L. Peirce	144,630	Nov. 18, 1873	402	135	4	534
Spinning-ring rail and holder	G. W. Spaulding and W. T. Carroll	135,944	Feb. 18, 1873	518	169	3	194
Spinning-ring, Restoring ring-traveler	F. Tully	134,712	Jan. 7, 1873	199	64	3	22
Spinning-ring traveler	J. Goulding	136,719	Mar. 11, 1873	335	111	3	281
Spiral springs for furniture	H. Hard	136,507	Mar. 4, 1873	135	44	3	256
Spirits and prevention of fraud upon the revenue, Apparatus for the production of.	J. Dawson	134,524	Jan. 7, 1873	20	7	3	9
Spittoon	F. Gaisberg	140,027	June 17, 1873	538	170	3	675
Spittoon	J. L. Howard	136,060	Feb. 18, 1873	616	202	3	202
Spittoon	E. Mather	135,234	Jan. 23, 1873	698	224	3	104
Spittoon	H. Tongue	139,213	May 20, 1873	684	215	3	576
Spittoon	W. H. Tyrrell	140,323	June 24, 1873	818	259	3	707
Spittoon, Railway-car	H. J. Zimmerman	138,464	Apr. 29, 1873	1,109	350	3	488
Splint	A. Wheat	140,662	July 8, 1873	287	97	4	43
Splint-cutting machine	C. P. and C. D. Clark	138,378	Apr. 29, 1873	1,030	325	3	482
Splitting-gauge	T. Rice	142,584	Sept. 9, 1873	242	79	4	273
Spoke-machine	R. W. Coffee	138,616	May 6, 1873	129	42	3	508
Spoke-machine	A. McNeile	142,034	Aug. 19, 1873	574	189 190	4	199
Spoke-polishing machine	G. L. Rouse	140,732	July 8, 1873	344	116	4	48
Spoke-sawing machine	J. L. Thralls	142,749	Sept. 9, 1873	381	128	4	284
Spoke-setting machine	W. R. Greene	144,900	Nov. 25, 1873	637	217	4	564
Sponge-cup	W. McConnell	141,573	Aug. 5, 1873	141	45	4	147
Spool	A. Carmichel	135,626	Feb. 11, 1873	230	72	3	158
Spool-blanks, machine for making	J. T. Hawkins	137,136	Mar. 25, 1873	712	236 237	3	332
Spool-box	J. C. Bohn	135,071	Jan. 21, 1873	536	174	3	78
Spool-case	A. W. Harper	144,762	Nov. 18, 1873	513	174	4	543
Spool-exhibiting case	J. D. Cutter	135,782	Feb. 11, 1873	362	117	3	168
Spool-heads, Machinery for embossing	L. H. Dwelley	137,601	Apr. 8, 1873	297	92	3	393
Spool-holder	L. F. Ward	134,952	Jan. 14, 1873	418	134	3	54
Spool-holder and thread-cutter	A. P. Ayers	137,282	Apr. 1, 1873	3	1	3	357
Spool-stand	W. Harris	145,297	Dec. 9, 1873	237	80	4	617
Spool-stand and thread-cutter	L. F. Ward	135,609	Feb. 4, 1873	206	64	3	143
Spool-turning machine	E. C. Walker and W. M. Gooding	139,935	June 17, 1873	463	145	3	669
Spools, Machine for making	J. F. C. Rider	135,443	Feb. 4, 1873	46	14, 15	3	131
Spools, Mandrel for making	J. W. Foster	134,534	Jan. 7, 1873	29	9	3	9
Spooling-machine	J. F. Stone	139,930	June 17, 1873	460	144	3	669
Spooling-machine, Bobbin-holder for	A. M. Wade	144,041	Oct. 28, 1873	618	204	4	459
Spooling-machine, Measuring device for	T. K. Keith	144,985	Nov. 25, 1873	707	239	4	570
Spoon	J. Hart	146,070	Dec. 30, 1873	951	307	4	709
Spoon, fork, &c.	G. C. Robinson	135,590	Feb. 4, 1873	188	58	3	142
Spoon, Medicine	J. L. Colby and L. B. Thompson	139,944	June 17, 1873	471	148	3	670
Spoon, Mustache	E. B. A. Mitcheson	135,141	Jan. 21, 1873	593	193	3	83
Spring:							
<i>See</i> Air-spring.							
Bed-spring.							
Bed-bottom spring.							
Car-spring.							
Carriage-spring.							
Chair-spring.							
Coil-spring.							
Corset-spring.							
Door-spring.							
Door and gate spring.							
Furniture-spring.							
India-rubber spring.							
Rocking-chair spring.							
Spiral spring.							
Torsion-spring.							
Truss-spring.							
Vehicle-spring.							
Volute-spring.							
Wagon-spring.							
Watch-case spring.							
Spring coupling and brake, Internal	L. Mégy, J. DeEcheverria and F. Bazan	143,293	Sept. 30, 1873	850	292	4	360
Spring cushion, mattress, &c.	D. N. Selleg	144,362	Nov. '4, 1873	159	52	4	491
Spring-plate washer	F. R. Gridley	138,149	Apr. 22, 1873	797	254	3	456
Spring-power	T. Ebeling	144,894	Nov. 25, 1873	633	215	4	563
Spring-seat for wagons and carts	P. Weyand and P. Hill	144,426	Nov. 11, 1873	226	75	4	508
Square, Adjustable try	C. H. Schaeffer	139,821	June 10, 1873	358	111	3	653
Square, Attachment to carpenter's	J. Hyman	136,653	Mar. 11, 1873	280	94	3	277
Square, protractor, rule, bevel, plumb, and level, Combined.	C. J. Shoff	143,595	Oct. 14, 1873	182	62	4	404
Square, Try	W. F. Arnold	138,113	Apr. 22, 1873	770	245	3	453
Square, Try	L. Bailey	145,715	Dec. 23, 1873	620	203	4	672
Square, Try	W. H. Cooper	142,557	Sept. 9, 1873	219	71	4	271
Stage-machinery	J. Schönberg	137,725	Apr. 8, 1873	409	126	3	402
Stair-rail molding-machine	J. B. Margeson	144,402	Nov. 11, 1873	202	68	4	506
Stair-rod	E. J. Smith	138,704	May 6, 1873	210	66	3	514
Stair-rod fastener	W. B. Gould	144,758	Nov. 18, 1873	510	173	4	543
Stair-rod fastener	W. B. Gould	144,759	Nov. 18, 1873	511	173	4	543
Stalk-binding apparatus	S. Kuh	145,739	Dec. 23, 1873	643	210	4	673
Stalk-chopper	C. L. Spielman	136,106	Feb. 18, 1873	658	215	3	204
Stalk-cutter	V. Ansley and J. W. Weaver	142,187	Aug. 26, 1873	724	239	4	220
Stalk-cutter	J. and G. Armstrong	137,281	Apr. 1, 1873	2	1	3	357
Stalk-cutter	B. R. Harness	140,413	July 1, 1873	61	22	4	13
Stalk-cutter	S. B. Miller	137,707	Apr. 8, 1873	390	121	3	400
Stalk-cutter and land-roller, Combined	J. Price	136,866	Mar. 18, 1873	467	155	3	301
Stall for horses, Portable	J. W. Adams	144,304	Nov. 4, 1873	108	37	4	487
Stamp-affixer	R. P. Thian	142,822	Sept. 16, 1873	450	152	4	301
Stamp, Boot and shoe sole	A. M. Burnham	136,901	Mar. 18, 1873	498	165	3	303
Stamp, Branding	J. W. Dodge	136,710	Mar. 11, 1873	326	108	3	280

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Stamp-canceler, Rotary	W. Schacht	140,219	June 24, 1873	726	228	3	699
Stamp for cutting out figures	E. J. Fischer	138,559	May 6, 1873	83	27	3	504
Stamp, Fountain hand	F. J. Coutant	142,617	Sept. 9, 1873	269	88	4	275
Stamp, Hand	W. B. Gorham	142,099	Aug. 26, 1873	653	215	4	215
Stamp, Hand	G. H. Rountree	136,458	Mar. 4, 1873	88	30	3	253
Stamp, Hand-canceling	E. H. Thomas	139,486	June 3, 1873	39	13	3	612
Stamp, Revenue	R. F. Hunter	138,891	May 13, 1873	386	121	3	539
Stamp to letter, Machine for affixing	W. Benseman and E. Slocum	138,120	Apr. 22, 1873	775	247	3	454
Stamping sheet-metal ware, Machine for	T. P. Austin	135,750	Feb. 11, 1873	335	107	3	166
Stand:							
<i>See</i> Barrel-stand.							
Boiler-stand.							
Book-stand.							
Bottle-stand.							
Camera-stand.							
Caster-stand.							
Compositor's stand.							
Dish-stand.							
Dry-goods stand.							
Flower-stand.							
Lady's work-stand.							
Muff-stand.							
Music-stand.							
Painter's stand.							
Sewing-stand.							
Sewing-machine stand.							
Spool-stand.							
Toilet-stand.							
Wash-stand.							
Wire-stand.							
Work-stand.							
Staple-making machine	W. Malick	142,574	Sept. 9, 1873	234	76	4	273
Staple-pointing machine	W. Malick	144,401	Nov. 11, 1873	201	68	4	506
Starch, Apparatus for manufacture of	C. Gilbert	137,911	Apr. 15, 1873	578	182	3	428
Starch, Apparatus for manufacture of	T. Kingsford	140,141	June 24, 1873	660	208	3	693
Starch, Apparatus for manufacture of	T. Kingsford	141,442	Aug. 5, 1873	28	9	4	137
Starch, Apparatus for manufacture of	T. Kingsford	145,213	Dec. 2, 1873	157	54	4	598
Starch, Manufacture of	C. Gilbert	135,904	Feb. 18, 1873	486	157	3	191
Starch-mill	C. Gilbert	137,912	Apr. 15, 1873	579	182	3	428
Starching-machine	A. M. Dolph	144,071	Oct. 28, 1873	645	212	4	461
Starching-machine	L. Sternberger	135,171	Jan. 21, 1873	614	200	3	85
Station-indicator	C. Barton	138,989	May 20, 1873	477	{ 150 151 }	3	560
Station-indicator	O. B. Griggs	138,496	May 6, 1873	23	8	3	499
Station-indicator	J. K. Magie	137,853	Apr. 15, 1873	530	165	3	424
Station-indicator	J. W. Newlin and J. S. Simmerman	145,583	Dec. 16, 1873	497	163	4	650
Station-indicator, Pneumatic	J. P. Kealy and J. Rigney	144,909	Nov. 25, 1873	643	219	4	564
Stave crozing and chamfering machine	S. S. Gray	134,597	Jan. 7, 1873	93	30	3	14
Stave-dressing machine	J. J. Ralya	144,138	Oct. 28, 1873	698	232	4	465
Stave-jointer	J. E. Green	140,699	July 8, 1873	318	108	4	45
Stave-jointer	J. J. Ralya	138,762	May 13, 1873	273	85	3	530
Stave jointing and planing machine	R. W. George	139,242	May 27, 1873	723	228	3	587
Stave-jointing machine	R. W. George	135,903	Feb. 18, 1873	486	157	3	191
Stave-jointing machine	S. S. Gray	134,596	Jan. 7, 1873	91	29	3	14
Stave-jointing machine	E. and B. Holmes	141,003	July 22, 1873	612	207	4	86
Stave-jointing machine	C. Murdock	143,991	Oct. 28, 1873	573	191	4	455
Stave-machine	B. W. Warner	140,101	June 17, 1873	606	191	3	681
Stave-sawing machine	C. Murdock	143,992	Oct. 28, 1873	575	{ 191 192 }	4	455
Stave-sawing machine	N. J. Templeton	136,559	Mar. 4, 1873	187	60	3	260
Staves, Machine for chamfering and crozing barrel	J. W. Jones	134,892	Jan. 14, 1873	367	116	3	49
Staves, Machine for cutting gores in	C. Ruggles	143,466	Oct. 7, 1873	58	29	4	385
Stay-ends, Die for forging	P. N. Lowe	138,668	May 6, 1873	179	57	3	512
Stay-log	J. A. Squires	135,945	Feb. 18, 1873	518	169	3	194
Steam and air brake	W. Lougbridge	135,828	Feb. 11, 1873	410	133	3	171
Steam and air brake	A. Q. Smith and H. M. Ogden	134,774	Jan. 14, 1873	261	85	3	41
Steam and air brake	B. W. Smith and E. O. Frink	136,462	Mar. 4, 1873	91	32	3	253
Steam and air brake	J. Y. Smith	136,781	Mar. 11, 1873	386	127	3	285
Steam and air brake	G. Westinghouse, jr.	144,096	Oct. 28, 1873	590	196	4	457
Steam and air brake for railway-cars	C. E. Moore and M. L. Wyman	141,805	Aug. 12, 1873	363	119	4	172
Steam and air brakes, Slack taking-up apparatus for	G. Westinghouse, jr.	144,582	Nov. 11, 1873	354	120	4	518
Steam and air engine	F. J. Crouch	145,281	Dec. 9, 1873	222	75	4	616
Steam and vapor generator	R. Brereton	145,086	Dec. 2, 1873	45	14	4	589
Steam and water piping for buildings, System of	J. H. Mills	145,962	Dec. 30, 1873	858	279	4	701
Steam bathing-apparatus	W. Wolf	142,185	Aug. 26, 1873	723	239	4	220
Steam-boiler	O. W. Allison	146,039	Dec. 30, 1873	921	298	4	706
Steam-boiler	H. Camp	134,784	Jan. 14, 1873	272	89	3	42
Steam-boiler	E. R. Cole	136,214	Feb. 25, 1873	764	247	3	225
Steam-boiler	W. H. Davis and R. V. De Guinon	136,041	Feb. 18, 1873	599	197	3	200
Steam-boiler	W. Douglass and J. H. Brown	142,330	Sept. 2, 1873	7	3	4	242
Steam-boiler	G. G. Lobdell	144,778	Nov. 18, 1873	525	179	4	544
Steam-boiler	T. W. Pratt	142,273	Aug. 26, 1873	796	263	4	226
Steam-boiler	S. Ritty	141,172	July 22, 1873	766	252	4	99
Steam-boiler	C. Stewart	142,180	Aug. 26, 1873	719	238	4	220
Steam-boiler	F. A. Woodson	134,720	Jan. 7, 1873	205	66	3	23
Steam-boiler	J. R. Worswick and E. Lewis	144,378	Nov. 4, 1873	171	57, 58	4	492
Steam-boiler, Apparatus for feeding and returning water of condensation to	T. E. McNeil	138,673	May 6, 1873	184	59	3	512
Steam-boiler connection, Sectional	J. B. Root	146,097	Dec. 30, 1873	976	315	4	711
Steam-boiler, Dead-light for	J. C. Hoadley	143,574	Oct. 14, 1873	166	56	4	402
Steam-boiler feed and blow-off	R. P. Garsed and I. D. Buck	143,006	Sept. 23, 1873	610	207	4	324
Steam-boiler fire-plate	E. Boileau	135,759	Feb. 11, 1873	343	110	3	167
Steam-boiler for warming buildings	G. W. Blake	142,196	Aug. 26, 1873	733	242	4	221

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Steam-boiler heater	D. Coughlin	145,095	Dec. 2, 1873	52	16	4	589
Steam-boiler heater and feeder	J. Pilkington	140,301	June 24, 1873	794	252	3	705
Steam-boiler, Sectional	J. K. Abbott	142,976	Sept. 23, 1873	585	109	4	322
Steam-boiler, Sectional	G. H. Babcock and S. Wilcox	134,505	Jan. 7, 1873	1	1	3	7
Steam-boiler, Sectional	G. H. Babcock and S. Wilcox	135,877	Feb. 18, 1873	466	150	3	190
Steam-boiler, Sectional	J. Harris	135,910	Feb. 18, 1873	491	159	3	192
Steam-boiler, Sectional	T. E. McNeill	139,724	June 10, 1873	267	84	3	646
Steam-boiler, Sectional	H. B. Pancoast and F. I. Maule	136,453	Mar. 4, 1873	85	29	3	252
Steam-boiler, Upright	G. W. Rawson	140,729	July 8, 1873	342	116	4	47
Steam-boiler, Vertical	C. M. Miller	141,656	Aug. 12, 1873	232	73	4	162
Steam-boilers, Composition for covering	J. M. Allison	138,358	Apr. 29, 1873	1,015	.....	3	481
Steam-boilers, Composition for preventing incrustation in	R. Hatfull	143,240	Sept. 30, 1873	807	.....	4	356
Steam-boilers, Composition for removing and preventing incrustations in	C. Burfitt	144,254	Nov. 4, 1873	73	.....	4	484
Steam-boilers, Compound for preventing incrustation of	J. J. Lavo	137,935	Apr. 15, 1873	596	.....	3	430
Steam-boilers, Compound for preventing incrustation in	T. E. Petersen	140,589	July 8, 1873	227	.....	4	38
Steam-boilers, Means for preventing incrustation in	R. A. Fisher	140,263	June 24, 1873	761	.....	3	702
Steam-boilers, Plug or ferrule for stopping leaks in the tubes of	R. A. Copeland	145,631	Dec. 16, 1873	537	176	4	653
Steam-boilers, Preventing corrosion of stay-bolts in	J. Cochrane	136,213	Feb. 25, 1873	763	.....	3	225
Steam-boilers, Sediment-collector and blow-off for	J. P. Leonard and G. Hancock	134,811	Jan. 14, 1873	296	95	3	44
Steam-boilers, Straw-burning attachment for	D. W. Kellogg and B. C. Coffin	141,359	July 29, 1873	960	313	4	122
Steam-boiling apparatus	E. Moncuse	135,142	Jan. 21, 1873	594	193	3	83
Steam-brake for railway car	N. Nilson	144,410	Nov. 11, 1873	208	70	4	507
Steam-condensing and water-heating tank	C. N. Tyler	139,634	June 3, 1873	162	54	3	622
Steam-cylinder and piston-valve	G. G. Pickering	144,788	Nov. 18, 1873	532	181	4	545
Steam-elevator	T. W. Eaton	143,971	Oct. 28, 1873	555	184	4	454
Steam-engine	R. T. P. Allen	142,660	Sept. 9, 1873	205	101	4	278
Steam-engine	G. H. Babcock and S. Wilcox	139,448	June 3, 1873	1	1	3	609
Steam-engine	A. Beekman	144,883	Nov. 25, 1873	627	213	4	563
Steam-engine	A. Fraser	141,343	July 29, 1873	945	307	4	121
Steam-engine	J. H. Strehli	142,295	Aug. 26, 1873	815	269	4	228
Steam-engine, Compound	J. H. Cooper and A. D. Emery	140,892	July 15, 1873	487	164	4	67
Steam-engine crank attachment	J. H. McGowan and D. B. Caldwell	143,292	Sept. 30, 1873	848	292	4	360
Steam-engine cylinder	H. Gerner	143,008	Sept. 23, 1873	612	208	4	324
Steam-engine, Hydro	J. Widmer	135,024	Jan. 21, 1873	497	160	3	75
Steam-engine, Hydrodynamic	W. Burnett	137,759	Apr. 15, 1873	449	140	3	418
Steam-engine lubricator	W. R. Patterson	138,343	Apr. 29, 1873	1,002	315	3	480
Steam-engine, Portable	R. Scheidler and J. H. McNamar	141,955	Aug. 19, 1873	503	166	4	193
Steam-gage, Recording	J. B. Edson	145,495	Dec. 16, 1873	414	136	4	643
Steam-gage, Registering	E. H. Ashcroft	141,307	July 29, 1873	904	296	4	118
Steam-gage, Registering	G. H. Crosby	140,018	June 17, 1873	529	168	3	675
Steam-gage, Registering	P. Maltby	143,630	Oct. 14, 1873	214	72	4	406
Steam-generator	G. H. Babcock and S. Wilcox	136,691	Mar. 11, 1873	310	105	3	279
Steam-generator	W. C. Baker	144,047	Oct. 28, 1873	624	206	4	459
Steam-generator	J. S. Baldwin	135,062	Jan. 21, 1873	530	172	3	78
Steam-generator	I. Barton	140,872	July 15, 1873	469	159	4	66
Steam-generator	J. W. Bookwalter	134,635	Jan. 7, 1873	127	41	3	17
Steam-generator	N. P. Brightman	138,607	May 6, 1873	120	40	3	507
Steam-generator	R. Gerner	143,007	Sept. 23, 1873	611	208	4	324
Steam-generator	E. Goddard	144,024	Oct. 28, 1873	605	200	4	458
Steam-generator	E. Goddard	145,293	Dec. 9, 1873	234	79	4	616
Steam-generator	W. Golding	144,088	Oct. 28, 1873	659	217	4	462
Steam-generator	T. Harang	135,219	Jan. 28, 1873	681	220	3	102
Steam-generator	R. Hooper	138,025	Apr. 22, 1873	691	218	3	447
Steam-generator	W. E. Kelly	141,798	Aug. 12, 1873	358	118	4	172
Steam-generator	A. R. McDonald	135,236	Jan. 28, 1873	700	224	3	104
Steam-generator	P. J. McMahon	135,996	Feb. 18, 1873	561	185	3	197
Steam-generator	T. E. McNeill and R. N. Pratt	141,578	Aug. 5, 1873	144	46	4	147
Steam-generator	J. H. Mills	138,269	Apr. 29, 1873	935	295	3	475
Steam-generator	D. Parsell	137,953	Apr. 15, 1873	610	192	3	431
Steam-generator	H. Pease	140,070	June 17, 1873	579	183	3	679
Steam-generator	H. M. Quackenbush	145,682	Dec. 16, 1873	581	191	4	656
Steam-generator	J. Ryan	141,239	July 29, 1873	843	275	4	112
Steam-generator	J. Ryan	145,530	Dec. 16, 1873	455	149	4	646
Steam-generator	W. P. Trowbridge	142,534	Sept. 2, 1873	190	62	4	257
Steam-generator	H. P. Wright	141,974	Aug. 19, 1873	517	171	4	194
Steam-generator, Device for cleaning	D. L. Latourette	145,577	Dec. 16, 1873	491	162	4	649
Steam-generator, Oil-burning	O. W. Ketchum	136,524	Mar. 4, 1873	154	50	3	258
Steam-generator, Sectional	W. W. Crane	138,791	May 13, 1873	300	92	3	532
Steam-generator, Sectional	W. W. Crane	138,792	May 13, 1873	301	92, 93	3	532
Steam-generator, Sectional	M. T. Davidson	138,866	May 13, 1873	365	113	3	537
Steam-generator, Sectional	W. E. Kelly	141,799	Aug. 12, 1873	359	118	4	172
Steam-generator, Sectional	J. D. Lynde	145,743	Dec. 23, 1873	645	{ 211 } 212	4	674
Steam-generator, Sectional	D. Renshaw	143,842	Oct. 21, 1873	426	142	4	433
Steam-generator, Sectional	D. Renshaw	143,843	Oct. 21, 1873	427	{ 142 } 143	4	433
Steam-generator, Sectional	D. Renshaw	143,844	Oct. 21, 1873	428	143	4	433
Steam-generator, Sectional	D. Renshaw	143,845	Oct. 21, 1873	429	143	4	433
Steam-generator, Sectional	J. B. Sweetland	135,862	Feb. 11, 1873	435	142	3	173
Steam-generator, Tubular	J. M. Hicks	134,803	Jan. 14, 1873	286	93	3	43
Steam-heater	W. M. Fuller	144,527	Nov. 11, 1873	307	103	4	515
Steam-heater	W. M. Fuller	145,167	Dec. 2, 1873	118	39	4	595
Steam-heater	P. H. Merrill	143,525	Oct. 7, 1873	108	37	4	389
Steam-heater	G. B. Riggins	138,936	May 13, 1873	421	132	3	542
Steam-heater	E. Russell	138,200	Apr. 22, 1873	848	268	3	459
Steam-heater coupling for railway-cars	W. N. McDuffy and B. F. Jaques	135,137	Jan. 21, 1873	589	191	3	82
Steam-jet apparatus for forcing and exhausting air and condensing steam	E. Korting	142,856	Sept. 16, 1873	477	163	4	303

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Steam-lubricator	R. A. Filkins	142,385	Sept. 2, 1873	59	20	4	247
Steam-lubricator	W. Gowenlock	137,070	Mar. 25, 1873	657	218	3	328
Steam-lubricator	W. Hamilton	137,073	Mar. 25, 1873	660	219	3	328
Steam-lubricator	W. Hamilton	140,270	June 24, 1873	768	242	3	702
Steam or air brake, Operating	S. F. Clouser	138,859	May 13, 1873	361	112	3	537
Steam-pipe covering	C. M. O'Hara	139,968	June 17, 1873	488	154	3	671
Steam-pipe trap	M. T. Davidson	145,157	Dec. 2, 1873	109	36	4	594
Steam-pressure regulator	A. J. Ballard	136,202	Feb. 25, 1873	755	244	3	224
Steam-trap	R. J. Barr	145,480	Dec. 16, 1873	401	132	4	642
Steam-trap	J. Bishop	145,387	Dec. 9, 1873	313	105	4	623
Steam-trap	J. H. Blessing	137,285	Apr. 1, 1873	5	2	3	357
Steam-trap	J. H. Blessing	142,323	Sept. 2, 1873	1	1	4	242
Steam-trap	J. W. Hodges	143,761	Oct. 21, 1873	356	118	4	427
Steam-trap	H. S. Maxim and L. P. Hawes	141,063	July 22, 1873	663	223	4	91
Steam-trap	E. L. Perkins, J. H. Moulton, and C. E. Sawyer	141,946	Aug. 19, 1873	496	164	4	192
Steam-washer	C. A. Bradley	137,591	Apr. 8, 1873	289	89	3	392
Steam-washer	J. Davis	137,296	Apr. 1, 1873	15	5	3	358
Steamer, Culinary	H. and J. Wooten	138,550	May 6, 1873	75	24	3	504
Steaming apparatus, Grain	J. C. Hunt	142,237	Aug. 26, 1873	768	253	4	224
Steel, Apparatus for converting iron into	J. Webster	137,742	Apr. 8, 1873	426	{ 131 132 }	3	403
Steel for boiler-plates, &c., Manufacture of	O. Bolton, jr., and J. Pedder	140,673	July 8, 1873	296		4	43
Steel, Manufacture of	J. Absterdam	139,751	June 10, 1873	295		3	648
Steel, Manufacture of	J. G. Blunt	137,885	Apr. 15, 1873	553	173	3	426
Steel, Manufacture of	T. Brooks	135,768	Feb. 11, 1873	352		3	167
Steel, Manufacture of	C. Burgess	141,320	July 29, 1873	918		4	119
Steel, Manufacture of	W. Dougherty	139,778	June 10, 1873	320	99	3	650
Steel, Manufacture of	H. A. Levallois	134,685	Jan. 7, 1873	176		3	20
Steel, Manufacture of	C. M. Nes	145,005	Nov. 25, 1873	725		4	572
Steel plates, Manufacture of	O. Bolton, jr.	140,762	July 15, 1873	376	128	4	58
Steel, Process of hardening	S. W. Etchell	134,872	Jan. 14, 1873	349		3	48
Steel wire and sheets of steel, Hardening	A. Benjamin	141,105	July 22, 1873	703		4	94
Steering-apparatus	D. N. B. Coffin, jr.	134,516	Jan. 7, 1873	13	5	3	8
Steering-apparatus	H. Keen	143,017	Sept. 23, 1873	620	211	4	325
Steering-apparatus	J. Myers	141,660	Aug. 12, 1873	235	74	4	162
Steering-apparatus	M. R. Perkins	144,220	Nov. 4, 1873	45	13	4	482
Steering-apparatus	C. A. Seavey	141,958	Aug. 19, 1873	505	167	4	193
Steering-apparatus	H. F. Shaw	142,047	Aug. 19, 1873	591	194	4	200
Steering-apparatus	J. F. Sparr	136,464	Mar. 4, 1873	97	33	3	253
Steering-apparatus	W. E. Thomas	143,200	Sept. 23, 1873	764	264	4	337
Steering apparatus, Vessel	C. W. Buffington	145,394	Dec. 9, 1873	318	108	4	623
Steering apparatus, Vessel	S. Hunt	138,652	May 6, 1873	162	52	3	511
Steering apparatus, Vessel	A. Siebenthal	141,598	Aug. 5, 1873	163	52	4	148
Steering apparatus, Vessel	H. J. Smith	137,574	Apr. 8, 1873	276	85	3	391
Steering vessel by steam, Apparatus for	W. W. Dungan	136,493	Mar. 4, 1873	122	39	3	255
Stench-trap	P. W. Doherty	134,652	Jan. 7, 1873	144	46	3	18
Stench-trap	J. P. Hyde	143,907	Oct. 21, 1873	480	161	4	437
Stench-trap	T. Ledbetter	140,145	June 24, 1873	664	209	3	694
Stench-trap	J. Semple	142,739	Sept. 9, 1873	372	125	4	284
Stench-trap, Core for casting	M. Gafney	137,133	Mar. 25, 1873	711	236	3	332
Stench-trap, Mold for casting	A. H. Hook	141,353	July 29, 1873	955	311	4	121
Stencil-plate	F. L. Morrison	137,317	Apr. 1, 1873	35	11	3	360
Stereoscope	P. Murphy	136,333	Feb. 25, 1873	868	{ 279 280 }	3	233
Stereoscope	A. Quirolo	138,930	May 13, 1873	416	130	3	542
Stereoscope	L. D. Sibley	141,822	Aug. 12, 1873	376	123	4	173
Stereoscope, Folding	J. A. Bazin	139,534	June 3, 1873	76	26	3	615
Stereoscopic camera	W. Harris	145,296	Dec. 9, 1873	236	79	4	617
Stereoscopic picture-holder	S. D. Samson and G. H. Smith	143,467	Oct. 7, 1873	58	20	4	385
Stereotype-block holder	M. J. Hughes	136,244	Feb. 25, 1873	787	255	3	227
Stereotype, Making rubber	G. K. Cooke	138,006	Apr. 22, 1873	674	213	3	446
Stereotype-molds, Machine for making	R. A. Hill	140,921	July 15, 1873	518	174	4	69
Stereotype-plate holder	C. Hurst	139,393	May 27, 1873	854	273	3	598
Stereotype-plate holder	W. Schnauffer	136,769	Mar. 11, 1873	375	124	3	284
Stereotype-plate holder	F. Scholefield	138,290	Apr. 29, 1873	956	301	3	476
Stereotype-plates in casting, Blocking	M. J. Hughes	145,179	Dec. 2, 1873	132	43	4	596
Stereotype-plates, Machine for making matrices for	J. A. Marquez	136,442	Mar. 4, 1873	76	26	3	251
Stereotype-plates, Machine for planing	H. Barth	136,204	Feb. 25, 1873	756	244	3	224
Step and step-box	J. Watson	140,977	July 15, 1873	575	193	4	74
Step-cover and wheel-fender combined	F. H. Niemann	139,602	June 3, 1873	137	45	3	620
Step, Illuminating ventilating	T. Hyatt	145,209	Dec. 2, 1873	152	52	4	597
Stew-pan	G. W. Griswold	136,596	Mar. 11, 1873	232	78	3	273
Still for alcoholic spirits	C. E. Werner	145,704	Dec. 16, 1873	602	197	4	658
Still for petroleum and other liquids	A. H. Tait and J. W. Avis	135,673	Feb. 11, 1873	271	85	3	161
Still, Oil	E. Schalk	136,008	Feb. 18, 1873	571	189	3	198
Still, Oil	W. B. Snow	137,496	Apr. 1, 1873	201	61	3	373
Still, Oil	J. L. Stewart and J. B. Dubler	136,557	Mar. 4, 1873	185	59, 60	3	260
Still, Turpentine	A. K. Lee	138,508	May 6, 1873	32	11, 12	3	500
Stilts	N. W. Ainée	144,491	Nov. 11, 1873	277	93	4	512
Stilts	T. J. Sheears	144,799	Nov. 18, 1873	544	185	4	545
Stilts	G. J. Stevens	137,869	Apr. 15, 1873	541	169	3	425
Stirrup	J. S. Fee	137,668	Apr. 8, 1873	356	110	3	397
Stirrup	A. J. Herring	145,869	Dec. 23, 1873	753	245	4	682
Stirrup	N. C. Thompson	143,732	Oct. 14, 1873	313	103	4	414
Stirrup, Riding	A. J. Herring	135,547	Feb. 4, 1873	143	46	3	139
Stirrup, Safety	L. R. Jones	139,160	May 20, 1873	639	199	3	572
Stock and die	J. W. Hardie	145,500	Dec. 16, 1873	418	137	4	643
Stocking-darning machine	B. Arnold	138,981	May 20, 1873	469	147	3	559
Stocking-darning machine	B. Arnold	138,982	May 20, 1873	470	148	3	559
Stocking-supporter	A. C. Adams	144,302	Nov. 4, 1873	107	36	4	487
Stocking-supporter	A. C. Adams	144,303	Nov. 4, 1873	108	36	4	487
Stocking-supporter	E. K. Rand	142,118	Aug. 26, 1873	669	220	4	216

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Stocking-supporter, Clasp for.....	S. K. Ellis.....	137, 539	Apr. 8, 1873	244	75	3	388
Stockings, &c., Clasp for supporting.....	J. E. Treat.....	145, 074	Dec. 2, 1873	30	10	4	588
Stone and glass polishing machine.....	J. Meisse.....	140, 937	July 15, 1873	538	179	4	71
Stove and range broiler-attachment.....	J. S. York.....	137, 278	Mar. 25, 1873	842	277	3	342
Stone, Artificial.....	J. J. Bartlett.....	140, 239	June 24, 1873	741	.....	3	700
Stone, Artificial.....	T. Chrimes.....	145, 277	Dec. 9, 1873	218	.....	4	615
Stone, Artificial.....	P. Daniels.....	136, 904	Mar. 18, 1873	509	.....	3	303
Stone, Artificial.....	R. Lemare.....	136, 604	Mar. 11, 1873	238	.....	3	273
Stone, Artificial.....	W. H. Lewis.....	139, 167	May 20, 1873	645	.....	3	573
Stone, Artificial.....	A. Ott.....	137, 859	Apr. 15, 1873	534	.....	3	425
Stone-channeling machine.....	A. S. Gear.....	142, 096	Aug. 26, 1873	651	214	4	214
Stone, Composition for artificial.....	W. Hedley.....	136, 160	Feb. 25, 1873	723	.....	3	232
Stone, &c., Composition for forming.....	J. J. Bartlett.....	134, 628	Jan. 7, 1873	120	.....	3	16
Stone, Compound for making artificial.....	W. E. Ferslen.....	143, 563	Oct. 14, 1873	157	.....	4	402
Stone-crusher.....	H. R. Marsden.....	137, 939	Apr. 15, 1873	600	188	3	430
Stone-crusher.....	A. H. Smith.....	140, 085	June 17, 1873	594	187	3	680
Stone-cutter.....	G. Stacy.....	144, 640	Nov. 18, 1873	411	138	4	534
Stone-cutter and other tools, Mode of fastening cutter in.....	G. Stacy.....	144, 639	Nov. 18, 1873	410	138	4	534
Stone-cutting machine.....	A. S. Gear.....	135, 642	Feb. 11, 1873	243	77	3	159
Stone-cutting machine.....	C. E. Odgers.....	136, 001	Feb. 18, 1873	566	{ 186 187 }	3	198
Stone cutting and dressing machine.....	W. A. Forman.....	137, 354	Apr. 1, 1873	70	22, 23	3	362
Stone cutting and dressing machine.....	J. B. West and J. C. Fish.....	145, 376	Dec. 9, 1873	301	101	4	622
Stone-cutting tool.....	H. Cottrell.....	144, 318	Nov. 4, 1873	121	40	4	488
Stone, Doublet.....	S. Bruhl.....	138, 314	Apr. 29, 1873	979	307	3	478
Stone-dressing machine.....	G. R. Ray.....	138, 100	Apr. 22, 1873	760	241	3	453
Stone, Expelling air from composition for artificial.....	G. A. Frear.....	137, 193	Mar. 25, 1873	768	254	3	336
Stone facing-machine, Cobble.....	L. Dutertre.....	142, 089	Aug. 26, 1873	645	212	4	214
Stone grinding and polishing machine.....	J. Finn.....	135, 535	Feb. 4, 1873	130	41	3	138
Stone, Machine for cutting and working.....	H. Cottrell.....	144, 316	Nov. 4, 1873	118	40	4	488
Stone, Machine for cutting cobble.....	H. Lombard, J. P. Morrill, and L. A. Sweatt.....	144, 398	Nov. 11, 1873	199	67	4	506
Stone, Machine for cutting, rubbing, and drilling.....	P. H. Hopkins.....	142, 019	Aug. 19, 1873	559	185	4	198
Stone, Machine for turning.....	A. S. Gear.....	136, 432	Mar. 4, 1873	68	24	3	251
Stone, Making artificial.....	D. M. Sprogle.....	139, 274	May 27, 1873	756	239	3	590
Stone, Manufacture of artificial.....	J. L. Rowland.....	137, 322	Apr. 1, 1873	40	13	3	360
Stone, Marbleized composition.....	T. Carson.....	137, 127	Mar. 25, 1873	706	.....	3	331
Stone, Method of splitting.....	D. Croghan.....	140, 681	July 8, 1873	303	102	4	44
Stone-planing machine.....	A. T. Merriman.....	139, 409	May 27, 1873	872	279	3	599
Stone, Process of manufacturing artificial.....	E. L. Ransome.....	145, 363	Dec. 9, 1873	292	.....	4	621
Stone-puller.....	G. Sprinkel.....	136, 941	Mar. 18, 1873	531	176	3	306
Stone-sawing machine.....	H. Cottrell.....	144, 317	Nov. 4, 1873	120	40	4	488
Stone, tile, pavement, &c., Composition for artificial.....	A. Pelletier.....	136, 862	Mar. 18, 1873	464	.....	3	301
Stone-tool.....	I. Curtner.....	146, 051	Dec. 30, 1873	936	302	4	708
Stool.....	C. B. Sheldon.....	141, 391	July 29, 1873	990	321	4	124
Stool, Adjustable.....	A. Doll.....	141, 208	July 29, 1873	813	266	4	110
Stool and table pedestal.....	J. R. Lomas.....	140, 054	June 17, 1873	564	178	3	678
Stool, Dentist's.....	I. W. Lyon.....	135, 924	Feb. 18, 1873	502	163	3	193
Stool, Milking.....	G. T. Lincoln.....	142, 247	Aug. 26, 1873	776	255	4	225
Stool, Office and counting-house.....	A. D. Cartwright.....	144, 441	Nov. 11, 1873	236	79	4	509
Stool or chair.....	H. Ocorr.....	139, 730	June 10, 1873	273	85	3	647
Stool or chair, Revolving.....	J. J. Vollrath.....	144, 806	Nov. 18, 1873	550	186	4	546
Stool, Piano and other.....	R. W. Archer.....	138, 600	May 6, 1873	115	38	3	507
Stool, Store.....	A. A. Murphy.....	138, 271	Apr. 29, 1873	938	296	3	475
Stools, tables, &c., Standard for.....	S. H. Newcomb.....	143, 836	Oct. 21, 1873	422	141	4	433
Stopper:							
See Bottle-stopper.							
Cable-stopper.							
Oil-can stopper.							
Rigging-stopper.							
Stove.....	B. Düerstock.....	141, 771	Aug. 12, 1873	329	108	4	170
Stove and heater, Railway-car.....	J. Q. C. Searle.....	136, 773	Mar. 11, 1873	378	125	3	285
Stove, Base-burning.....	F. W. Born.....	139, 231	May 27, 1873	715	225	3	586
Stove, Base-burning.....	W. Doyle.....	141, 770	Aug. 12, 1873	328	108	4	170
Stove, Base-burning.....	A. Hathaway.....	143, 693	Oct. 14, 1873	274	90, 91	4	411
Stove, Base-burning.....	S. H. La Rue.....	144, 461	Nov. 11, 1873	251	84	4	510
Stove, Base-burning.....	J. Q. C. Searle.....	136, 772	Mar. 11, 1873	377	125	3	284
Stove, Base-burning cooking.....	H. Ingraham.....	140, 138	June 24, 1873	658	207	3	693
Stove, Base-burning fire-place.....	S. B. Sexton.....	141, 821	Aug. 12, 1873	375	123	4	173
Stove-board and floor-protector, Metallic.....	P. H. Rose.....	134, 563	Jan. 7, 1873	58	17	3	11
Stove, Coal.....	H. Meidinger.....	137, 855	Apr. 15, 1873	531	165	3	424
Stove, Coal-oil.....	J. H. Thorp.....	140, 743	July 8, 1873	357	121	4	49
Stove, Combined heating and cooking.....	B. McConnell.....	139, 172	May 20, 1873	648	202	3	573
Stove, Cooking.....	A. C. Barstow.....	137, 996	Apr. 22, 1873	661	209	3	445
Stove, Cooking.....	R. H. Brown.....	145, 089	Dec. 2, 1873	49	15	4	589
Stove, Cooking.....	L. E. Clow.....	145, 276	Dec. 9, 1873	218	74	4	615
Stove, Cooking.....	C. H. Douglas.....	140, 996	July 22, 1873	606	204	4	86
Stove, Cooking.....	M. G. Fagan.....	135, 325	Jan. 28, 1873	777	251	3	110
Stove, Cooking.....	W. A. Greene.....	135, 273	Jan. 28, 1873	730	234	3	106
Stove, Cooking.....	H. A. Hummer.....	142, 467	Sept. 2, 1873	131	43	4	253
Stove, Cooking.....	J. R. Hyde.....	140, 044	June 17, 1873	554	175	3	677
Stove, Cooking.....	W. W. Karshner.....	141, 508	Aug. 5, 1873	88	27	4	142
Stove, Cooking.....	D. G. Littlefield.....	138, 093	Apr. 22, 1873	755	239	3	452
Stove, Cooking.....	S. Long.....	145, 355	Dec. 9, 1873	287	96	4	621
Stove, Cooking.....	G. McAdams.....	140, 210	June 24, 1873	719	226	3	698
Stove, Cooking.....	J. McMaster.....	144, 279	Nov. 4, 1873	92	30	4	485
Stove, Cooking.....	D. H. Nation and E. C. Little.....	142, 935	Sept. 16, 1873	544	185	4	309
Stove, Device for feeding.....	B. Connelly.....	135, 265	Jan. 28, 1873	725	232	3	106
Stove, Device for retaining fire in.....	E. Y. Robbins.....	144, 357	Nov. 4, 1873	155	51	4	491
Stove, Dome for.....	A. Taylor.....	137, 976	Apr. 15, 1873	631	199	3	433
Stove-door.....	A. S. Shontz.....	144, 230	Nov. 4, 1873	56	17	4	482
Stove-door attachment.....	W. O. Smith.....	145, 132	Dec. 2, 1873	90	29	4	592
Stove-door frame.....	S. Smith.....	137, 328	Apr. 1, 1873	49	14	3	361
Stove-door to frame, Mode of attaching.....	S. Smith.....	139, 740	June 10, 1873	285	88	3	648
Stove, Elevated-oven attachment for.....	G. Craine and J. W. Bloss.....	142, 558	Sept. 9, 1873	220	71	4	272

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Stove-flue, Extension for.....	F. Warriner.....	143, 547	Oct. 7, 1873	134	44, 45	4	391
Stove-foot shoe.....	A. D. Coles.....	140, 576	July 8, 1873	216	72	4	37
Stove for smoke-houses.....	I. N. Deardorff.....	145, 054	Dec. 2, 1873	12	4	4	587
Stove, Heating.....	W. R. Akers and J. E. Johnson..	137, 818	Apr. 15, 1873	500	156	3	422
Stove, Heating.....	P. D. Beckwith.....	135, 621	Feb. 11, 1873	225	71	3	157
Stove, Heating.....	R. H. Brown.....	142, 078	Aug. 26, 1873	633	208	4	213
Stove, Heating.....	R. H. Brown.....	142, 079	Aug. 26, 1873	634	208	4	213
Stove, Heating.....	L. R. Comstock.....	141, 765	Aug. 12, 1873	323	106	4	169
Stove, Heating.....	J. Johnson.....	144, 105	Oct. 28, 1873	673	222	4	463
Stove, Heating.....	J. Johnson.....	145, 424	Dec. 9, 1873	346	116	4	625
Stove, Heating.....	E. C. Little and D. H. Nation..	142, 707	Sept. 9, 1873	343	115	4	281
Stove, Heating.....	I. G. Macfarlane.....	145, 744	Dec. 23, 1873	646	212	4	674
Stove, Heating.....	D. N. Mason.....	139, 256	May 27, 1873	735	232	3	588
Stove, Heating.....	G. R. Moore.....	137, 467	Apr. 1, 1873	171	54	3	371
Stove, Heating.....	G. R. Moore.....	140, 155	June 24, 1873	673	211	3	694
Stove, Heating.....	S. B. Patterson.....	142, 270	Aug. 26, 1873	794	262	4	226
Stove, Heating.....	J. L. Ring.....	140, 843	July 15, 1873	445	151	4	64
Stove, Heating.....	T. H. Salmon.....	139, 618	June 3, 1873	151	50	3	621
Stove, Heating.....	S. Smith.....	135, 449	Feb. 4, 1873	54	18	3	131
Stove, Heating.....	C. G. Thompson.....	139, 035	May 20, 1873	515	{ 162 163 }	{ 3 3 }	563
Stove, Heating.....	W. B. Treadwell.....	134, 573	Jan. 7, 1873	68	21	3	12
Stove, Lamp.....	F. Janke.....	136, 063	Feb. 18, 1873	619	203	3	202
Stove, Lamp.....	E. Savoral.....	145, 531	Dec. 16, 1873	456	149	4	646
Stove, Laundry.....	J. H. Mitchell.....	142, 259	Aug. 26, 1873	785	259	4	226
Stove-leg.....	W. Doyle.....	145, 932	Dec. 30, 1873	829	270	4	699
Stove-leg.....	J. Q. C. Searle.....	135, 012	Jan. 21, 1873	485	156	3	74
Stove, Magazine for.....	J. R. Painter.....	141, 586	Aug. 5, 1873	150	48	4	147
Stove, Name-plate for.....	P. Klotz.....	143, 913	Oct. 21, 1873	484	163	4	438
Stove-pipe.....	L. Jurgens.....	137, 928	Apr. 15, 1873	590	186	3	429
Stove-pipe.....	H. L. Palmer.....	136, 755	Mar. 11, 1873	365	121	3	283
Stove-pipe.....	W. H. Stephenson.....	135, 170	Jan. 21, 1873	614	200	3	84
Stove-pipe connection.....	G. F. Brinkerhoff.....	143, 120	Sept. 23, 1873	703	241	4	332
Stove-pipe coupling.....	H. A. Mears.....	142, 254	Aug. 26, 1873	781	258	4	225
Stove-pipe cover, Adjustable.....	T. M. Losie.....	137, 457	Apr. 1, 1873	159	51	3	370
Stove-pipe-elbow machine.....	J. Beckman and J. Gibson.....	135, 880	Feb. 18, 1873	469	151	3	190
Stove-pipe extension-attachment.....	S. Johnson.....	136, 922	Mar. 18, 1873	516	170	3	305
Stove-pipe for vessel.....	J. Hall.....	142, 567	Sept. 9, 1873	228	74	4	272
Stove-pipe holder.....	G. Eckel.....	142, 777	Sept. 16, 1873	417	140	4	298
Stove-pipe joint.....	A. C. Sweetland.....	139, 932	June 17, 1873	462	144	3	669
Stove-pipe joint.....	J. Weaver.....	142, 879	Sept. 16, 1873	496	169	4	305
Stove-pipe shelf.....	J. F. Beckwith.....	143, 320	Sept. 30, 1873	875	299	4	362
Stove-pipe shelf.....	W. B. Elliott.....	138, 385	Apr. 29, 1873	1, 036	326	3	483
Stove-pipe shelf, &c.....	D. R. Moore.....	140, 939	July 15, 1873	539	180	4	71
Stove-pipe shelf.....	W. Patterson.....	140, 788	July 15, 1873	397	136	4	60
Stove-pipe shelf.....	W. J. and D. W. Stephenson.....	145, 251	Dec. 2, 1873	191	66	4	600
Stove-pipe shelf and drum, Combined.....	T. Bladon.....	140, 454	July 1, 1873	92	32	4	16
Stove-pipe stretcher, &c.....	G. Elsey.....	144, 967	Nov. 25, 1873	693	234	4	569
Stove-pipe thimble.....	V. Fath.....	143, 973	Oct. 28, 1873	559	185	4	454
Stove-pipe thimble.....	J. R. Fulton.....	142, 784	Sept. 16, 1873	422	142	4	298
Stove-pipe thimble.....	N. Linden.....	145, 579	Dec. 16, 1873	493	162	4	649
Stove-pipe thimble.....	T. D. Slauson.....	143, 852	Oct. 21, 1873	438	146	4	434
Stove-pipe thimble.....	H. Smith.....	140, 553	July 1, 1873	181	61	4	23
Stove-pipe thimble.....	F. Tarrant.....	139, 210	May 20, 1873	681	214	3	576
Stove-platform.....	G. E. Bingham and J. F. Ewing..	141, 106	July 22, 1873	704	235	4	94
Stove-platform.....	C. Brownell.....	143, 402	Oct. 7, 1873	5	2	4	381
Stove-platform.....	W. M. Conger.....	136, 589	Mar. 11, 1873	228	76	3	273
Stove-platform.....	W. Westlake.....	140, 393	July 1, 1873	48	16	4	12
Stove-polish.....	E. Chamness and J. Vaughn.....	141, 321	July 29, 1873	918	.....	4	119
Stove-polish.....	J. I. Danforth.....	139, 047	May 20, 1873	523	.....	3	563
Stove-polish.....	J. I. Danforth.....	139, 879	June 17, 1873	416	.....	3	665
Stove, Portable.....	N. E. Chase.....	137, 594	Apr. 8, 1873	290	90	3	392
Stove, Portable.....	S. J. Dibble.....	145, 491	Dec. 16, 1873	410	135	4	642
Stove, Portable.....	G. B. Isham.....	136, 521	Mar. 4, 1873	152	49	3	257
Stove, Portable.....	R. Moore.....	144, 469	Nov. 11, 1873	258	87	4	511
Stove, Portable cooking.....	N. O. Bond.....	139, 760	June 10, 1873	303	94	3	649
Stove, Railway-car.....	W. S. Jones.....	140, 831	July 15, 1873	436	148	4	63
Stove, Railway-car.....	M. Mooney, T. D. Van Dorn, and C. C. Winterberg.	143, 526	Oct. 7, 1873	109	38	4	389
Stove, Railway-car.....	A. Reese.....	142, 867	Sept. 16, 1873	487	166	4	304
Stove, Reservoir cooking.....	R. H. Brown.....	142, 080	Aug. 26, 1873	635	209	4	213
Stove, Reservoir cooking.....	A. B. Fales and H. Seabury.....	140, 354	July 1, 1873	19	6	4	9
Stove, Reservoir cooking.....	S. W. France.....	137, 355	Apr. 1, 1873	71	23	3	362
Stove, Reservoir cooking.....	J. R. Hyde.....	136, 730	Mar. 11, 1873	343	{ 113 114 }	{ 3 3 }	282
Stove, Reservoir cooking.....	H. Lappin.....	134, 683	Jan. 7, 1873	175	57	3	20
Stove, Reservoir cooking.....	D. G. Littlefield.....	139, 720	June 10, 1873	264	83	3	646
Stove, Reservoir cooking.....	D. H. Nation.....	142, 717	Sept. 9, 1873	351	118	4	282
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little..	138, 682	May 6, 1873	191	61	3	513
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little..	142, 931	Sept. 16, 1873	540	184	4	308
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little..	142, 932	Sept. 16, 1873	540	184	4	308
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little..	142, 933	Sept. 16, 1873	541	184	4	309
Stove, Reservoir cooking.....	D. H. Nation and E. C. Little..	142, 934	Sept. 16, 1873	543	185	4	309
Stove, Reservoir cooking.....	H. Stephens.....	137, 500	Apr. 1, 1873	205	62	3	373
Stove, Subaqueous gas.....	S. H. Starr.....	145, 458	Dec. 9, 1873	372	124	4	627
Stove, Summer.....	W. A. Barlow.....	140, 870	July 15, 1873	467	158	4	65
Stove, Supplemental attachment for cooking.....	J. Day.....	140, 252	June 24, 1873	751	237	3	701
Stove-support.....	W. M. Conger.....	137, 291	Apr. 1, 1873	11	4	3	358
Stove-support.....	W. M. Conger.....	137, 292	Apr. 1, 1873	12	4	3	358
Stove, Top-plate for cooking.....	J. Van.....	141, 838	Aug. 12, 1873	391	127	4	174
Stove, Top-plate for cooking.....	E. R. Wehrle.....	135, 457	Feb. 4, 1873	61	19	3	132
Stove-window.....	F. Warriner.....	136, 884	Mar. 18, 1873	482	160	3	302
Strainer, Beer.....	C. M. Powers.....	139, 971	June 17, 1873	490	155	3	671
Strainer, Cistern.....	N. G. Thomas.....	138, 594	May 6, 1873	111	36	3	507

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Strainer, Cream	R. W. Barnard	143, 115	Sept. 23, 1873	700	240	4	331
Strainer, Pulp	H. H. Olds	136, 002	Feb. 18, 1873	567	187	3	198
Strainer, Water	F. W. Mase	142, 711	Sept. 9, 1873	346	116	4	282
Strap:							
<i>See</i> Car-strap.							
Harness safety-strap.							
Hitching-strap.							
Leather-strap.							
Razor-strap.							
Shawl-strap.							
Shoulder-strap.							
Tug-strap.							
Strap-coupling	T. Cogswell	144, 957	Nov. 25, 1873	683	231	4	568
Straw-cutter	T. D. Anderson	145, 476	Dec. 16, 1873	397	131	4	641
Straw-cutter	J. F. Keller	135, 816	Feb. 11, 1873	401	129	3	171
Straw-cutter	A. Kindermann	143, 356	Sept. 30, 1873	912	310	4	365
Straw-cutter	R. A. Rash	142, 726	Sept. 9, 1873	357	121	4	283
Straw-cutter	T. Webb	141, 527	Aug. 5, 1873	101	31	4	143
Straw-cutter, Feed-roller for	J. H. Sharp	136, 774	Mar. 11, 1873	378	125	3	285
Straw or mill board	J. L. Thomson	135, 452	Feb. 4, 1873	56	.....	3	132
Street-sweeper	C. Geiger	142, 847	Sept. 16, 1873	472	160	4	302
Street-sweeper	O. W. Kellogg	136, 438	Mar. 4, 1873	73	25	3	251
Street-sweeper	W. Smith	141, 241	July 29, 1873	846	276	4	112
Street-sweeping machine	L. J. O'Connor	143, 888	Oct. 21, 1873	423	141	4	433
Streets and roads, Watering	I. Brown	144, 055	Oct. 28, 1873	632	208	4	460
Stubble-shaver and scraper combined	H. Von Phul, jr., and J. Mallon ..	144, 933	Nov. 25, 1873	664	225	4	566
Stucco ornament	A. D. Godard	139, 781	June 10, 1873	323	100	3	650
Stud and button	F. E. Brown	144, 598	Nov. 18, 1873	375	126	4	532
Stud for fastening neck-tie	J. A. Hard	135, 803	Feb. 11, 1873	390	125	3	170
Stud, Lacing	D. Heaton	137, 305	Apr. 1, 1873	23	7	3	359
Stud, &c., Safety	A. Kent	136, 166	Feb. 25, 1873	727	234	3	222
Stud, Shirt	O. S. Thayer	138, 299	Apr. 29, 1873	967	304	3	477
Stump-extractor	E. Bayliss	134, 507	Jan. 7, 1873	4	2	3	8
Stump-extractor	E. Colyar	137, 420	Apr. 1, 1873	124	41	3	367
Stump-extractor	W. Duffner	143, 129	Sept. 23, 1873	709	243	4	332
Stump-extractor	I. Flanders	141, 341	July 29, 1873	943	307	4	120
Stump-extractor	T. Herbig	141, 140	July 22, 1873	734	243	4	96
Stump-extractor	C. Mörchen and P. Doerfer	135, 658	Feb. 11, 1873	256	81	3	160
Stump-extractor	F. Plant	145, 966	Dec. 30, 1873	862	280	4	701
Submarine foundation	E. Manico	141, 283	July 29, 1873	883	289	4	116
Sugar and salt dryer	D. Lee	139, 400	May 27, 1873	865	277	3	598
Sugar and salt dryer	D. Lee	139, 401	May 27, 1873	865	277	3	598
Sugar and sirup, Apparatus for refining	S. H. Gilman	143, 754	Oct. 21, 1873	350	117	4	427
Sugar, Apparatus for manufacture of	S. Dod	135, 529	Feb. 4, 1873	123	39	3	137
Sugar-cane coverer	F. Roy	141, 464	Aug. 5, 1873	49	15	4	139
Sugar-cane, Process and apparatus for extracting juices of	G. Wilkinson, A. L. Possoz, J. P. Lafargue, and A. E. Dutreih.	137, 746	Apr. 8, 1873	430	133	3	403
Sugar-cane stubble from decay, Process of preserving	W. Green	143, 622	Oct. 14, 1873	209	.....	4	406
Sugar-dryer	A. Mackey	137, 459	Apr. 1, 1873	161	51	3	370
Sugar-evaporator	H. C. and T. W. Stevens	137, 576	Apr. 8, 1873	278	85	3	391
Sugar from molasses, &c., Cleansing	A. H. Tait	145, 460	Dec. 9, 1873	374	.....	4	628
Sugar from molasses, Extracting	J. B. Thoms	144, 369	Nov. 4, 1873	163	.....	4	492
Sugar, Granulating	J. A. Morrell	142, 498	Sept. 2, 1873	160	.....	4	255
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	134, 588	Jan. 7, 1873	83	26	3	13
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	140, 464	July 1, 1873	102	35	4	17
Sugar into blocks, Machine for cutting	P. O. Brunjes and A. Benneckendorf.	141, 201	July 29, 1873	803	263	4	109
Sugar manufacture	H. M. Aschenbrenner	146, 040	Dec. 30, 1873	922	299	4	706
Sugar, Manufacture of	J. A. Morrell	141, 067	July 22, 1873	667	.....	4	91
Sugar, Manufacture of	A. F. W. Partz	139, 078	May 20, 1873	560	.....	3	566
Sugar, Manufacture of loaf	E. Langen	134, 682	Jan. 7, 1873	174	57	3	20
Sugar, molasses, and saccharine juices, Purifying	J. M. O. Tamin	141, 831	Aug. 12, 1873	385	.....	4	174
Sugar stirrer, Maple	F. B. Graves	140, 361	July 1, 1873	23	8	4	10
Sugar with sulphurous acid in the vacuum-pan, Treating	A. H. Seyferth	135, 014	Jan. 21, 1873	487	157	3	74
Sulky	L. H. Jennison	144, 983	Nov. 25, 1873	706	238	4	570
Summer-furnace	W. P. Springer	136, 783	Mar. 11, 1873	388	128	3	285
Superheater	D. Renshaw	143, 846	Oct. 21, 1873	430	143	4	433
Superheater for steam-boilers	J. Wolford and R. Conner	138, 723	May 6, 1873	236	72	3	516
Supporter:							
<i>See</i> Abdominal-supporter.							
Ankle-supporter.							
Book-supporter.							
Eaves-trough supporter.							
Floor-timber supporter.							
Hammock-supporter.							
Lamp-shade supporter.							
Neck-tie supporter.							
Piles-supporter.							
Rein-supporter.							
Scaffold-supporter.							
Shirt-bosom supporter.							
Stocking-supporter.							
Stove-supporter.							
Table-leaf supporter.							
Trunk-lid supporter.							
Umbrella-supporter.							
Uterine-supporter.							
Vest-supporter.							
Wash-tub supporter.							
Suppository-mold	P. I. Spenzer	142, 524	Sept. 2, 1873	180	59	4	256
Suppository, Mold for making	L. R. Blackman	139, 858	June 17, 1873	394	123	3	664
Suspender-clasp	J. W. Smith	141, 087	July 22, 1873	686	230	4	92

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Suspenders	T. J. Flagg	144, 970	Nov. 25, 1873	695	235	4	569
Suspenders	B. J. Greely	141, 926	Aug. 19, 1873	481	158	4	191
Suspenders	S. Hamm	144, 091	Oct. 28, 1873	662	218	4	462
Suspenders	T. J. Irving	140, 045	June 17, 1873	555	175	3	677
Suspenders	A. Shenfield	140, 652	July 8, 1873	279	94	4	42
Suspenders	J. W. Wattles	144, 042	Oct. 28, 1873	619	205	4	459
Suspension-ring	G. Doolittle	136, 977	Mar. 18, 1873	560	186	3	309
Swaging-machine	H. M. Crippen	138, 617	May 6, 1873	130	42	3	508
Swimming-bath	P. Bralley	136, 128	Feb. 25, 1873	693	224	3	219
Swing	J. F. Quigg	136, 181	Feb. 25, 1873	739	238	3	223
Swing	E. A. Tuttle	135, 738	Feb. 11, 1873	324	104	3	165
Swing, Child's	W. H. Alcorn	137, 121	Mar. 25, 1873	701	233	3	331
Swing, Parlor	B. Strassle	135, 018	Jan. 21, 1873	492	158	3	75
Swinging-gate	J. J. Gentry and J. F. Collett	143, 342	Sept. 30, 1873	900	306	4	364
Switch:							
<i>See</i> Fly-switch.							
Railway-switch.							
Self-acting switch.							
Self-operating switch.							
Sword-blade, Machine for rolling	J. C. Richardson	143, 094	Sept. 23, 1873	683	235	4	336
Sword-hanger	S. McKeever	140, 151	June 24, 1873	670	210	3	694
Sword-sabbard, Casting ornament for	V. Price	139, 023	May 20, 1873	507	159	3	562
Syringe and pump	J. Speak	144, 802	Nov. 18, 1873	545	185	4	545
Syringe, Fountain	H. D. Lockwood	138, 417	Apr. 29, 1873	1, 064	335	3	485
Syringe, Hypodermic	E. Cutter	144, 661	Nov. 18, 1873	429	145	4	536
Syringe, Hypodermic	J. Leiter	145, 217	Dec. 2, 1873	160	55	4	598
Syringes, Cannula-point for	E. B. Nimmo	144, 352	Nov. 4, 1873	150	50	4	490
T.							
Table:							
<i>See</i> Auxiliary table.							
Billiard-table.							
Buffet-table.							
Copying-press table.							
Dining-table.							
Drawing-table.							
Extension-table.							
Folding-table.							
Game-table.							
Ironing-table.							
Office-table.							
Saw-table.							
Sawing-machine table.							
Self-waiting table.							
Sewing-machine table.							
Turn-table.							
Table	W. Jeffs	136, 837	Mar. 18, 1873	445	148	3	299
Table	J. C. Miller and E. S. Armstrong	135, 655	Feb. 11, 1873	254	80	3	160
Table	H. W. Pearsall	138, 431	Apr. 29, 1873	1, 079	341	3	486
Table	J. H. Wattles	138, 718	May 6, 1873	226	70	3	516
Table and secret writing-desk, Combined	C. Kade	144, 769	Nov. 18, 1873	519	176	4	543
Table-knife	W. H. Andrew	145, 080	Dec. 2, 1873	41	12	4	589
Table-leaf support	E. L. Abbott and S. T. Gibson	138, 309	Apr. 29, 1873	975	306	3	478
Table-leaf support	H. Imhof	137, 925	Apr. 15, 1873	588	185	3	429
Table-leaf support	W. Jeffs	136, 836	Mar. 18, 1873	445	147	3	299
Table-leaf support	A. C. Johnson	137, 210	Mar. 25, 1873	785	259	3	337
Table-leaf support	A. Marchand	137, 087	Mar. 18, 1873	672	223	3	329
Table-leaf support	J. K. Moffett	142, 260	Aug. 26, 1873	786	259	4	226
Table-leaf support	G. Payzant	138, 182	Apr. 22, 1873	832	264	3	458
Table-leaf support	E. W. Perrin	141, 887	Aug. 19, 1873	450	147	4	189
Table-leaf support	G. C. Thomas	138, 769	May 13, 1873	280	87	3	530
Table-leaf support	C. H. Wheeler	140, 102	June 17, 1873	607	191	3	681
Table, stool, and stand, Combined	J. A. Markle	140, 288	June 24, 1873	784	249	3	704
Tablet, Coating for writing	A. Schindler	134, 566	Jan. 7, 1873	60	.....	3	12
Tablet, platform or mat, Non-conducting	H. L. Palmer	141, 812	Aug. 12, 1873	369	121	4	173
Tablet, Writing	C. N. Brown	144, 950	Nov. 25, 1873	679	230	4	567
Tablet, Writing	A. Schindler	139, 266	May 27, 1873	746	.....	3	589
Tack-puller	C. W. Blakeslee	145, 837	Dec. 23, 1873	721	237	4	680
Tacks, Machine for separating and delivering	C. W. Glidden	135, 329	Jan. 28, 1873	780	{ 252 253 }	{ 3 4 }	110
Tacks, nails, and screws, to prevent corrosion and to color them, Coating.	G. Starks	144, 712	Nov. 18, 1873	470	159	4	539
Tacks, nails, &c., Metal coating	C. D. Hunt	135, 339	Jan. 28, 1873	791	.....	3	111
Tackle-block, Chain	S. D. Backus	144, 727	Nov. 18, 1873	482	163	4	540
Tackle-block, Hook and eye for	J. Holroyd	136, 833	Mar. 18, 1873	443	147	3	299
Tag	T. P. Marston	134, 757	Jan. 14, 1873	247	80	3	40
Tag-fastener	J. M. Goodridge	143, 621	Oct. 14, 1873	208	70	4	406
Tag-fastener	T. P. Marston	134, 756	Jan. 14, 1873	246	80	3	40
Tag-fastening	J. S. Loughery	134, 755	Jan. 14, 1873	245	80	3	40
Tag-holder	E. C. Stillman and E. F. Burrows	137, 257	Mar. 25, 1873	825	271	3	340
Tag-hook	T. P. Marston and N. M. Phillips	143, 364	Sept. 30, 1873	921	312	4	365
Tag-machine	C. M. O'Brien	139, 259	May 27, 1873	737	{ 233 234 }	{ 3 4 }	588
Tag-machine	J. H. Silvers	139, 270	May 27, 1873	750	238	3	589
Tailor's pressing-machine	A. C. Sawyer	137, 100	Mar. 25, 1873	682	226	3	329
Tallow, lard, &c., Process for purifying and bleaching	J. R. Brown	145, 840	Dec. 23, 1873	725	.....	4	680
Tallow obtained in rendering offal, Purifying and deodorizing.	B. F. Shaw	135, 373	Jan. 28, 1873	821	.....	3	113
Tallow or lard, Apparatus for drying and cooling	A. Smith	142, 744	Sept. 9, 1873	376	126	4	284
Tampico and bristles, Apparatus for combing and mixing.	G. Willett	142, 427	Sept. 2, 1873	92	30	4	250
Tan-bark, Apparatus for expressing liquid from spent.	L. Breval	135, 317	Jan. 28, 1873	767	248	3	109
Tan-dryer	N. Porter	145, 010	Nov. 25, 1873	729	246	4	572
Tan, Machine for desiccating	C. H. Mosley	135, 999	Feb. 18, 1873	564	186	3	198
Tan-vat	C. H. Manning	135, 231	Jan. 28, 1873	694	223	3	103

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Tan-vat.....	C. H. Manning.....	138,906	May 13, 1873	397	125	3	540
Tank and liquid measure, Combined.....	J. H. Corliss.....	145,725	Dec. 23, 1873	629	206	4	672
Tannin-extracts, &c., Apparatus for making.....	T. W. Johnson and A. W. Goodell.....	134,675	Jan. 7, 1873	167	55	3	20
Tanning.....	J. Carter and A. C. Keith.....	136,488	Mar. 4, 1873	118	.....	3	255
Tanning-apparatus.....	C. Herveux.....	139,892	June 17, 1873	428	133	3	666
Tanning-compound.....	J. B. Hite.....	140,040	June 17, 1873	552	.....	3	677
Tanning-compound.....	W. Thilmany.....	143,105	Sept. 23, 1873	692	.....	4	331
Tanning hides.....	A. Fleischhauer.....	135,214	Jan. 28, 1873	677	.....	3	102
Tanning, Process for.....	J. Davis and J. Armstrong.....	138,138	Apr. 22, 1873	789	.....	3	455
Tap and die.....	A. E. Barthel.....	139,651	June 10, 1873	195	64	3	641
Tap and faucet, Barrel.....	G. B. Taylor.....	145,695	Dec. 16, 1873	591	194	4	657
Tap, plug, and faucet connection.....	J. F. Kane.....	144,680	Nov. 18, 1873	444	149	4	537
Tape-cutting machine.....	J. S. Jewett.....	140,274	June 24, 1873	772	244	3	703
Taper-tubes, Machine for making.....	T. J. and J. T. Jones.....	141,932	Aug. 19, 1873	486	160	4	192
Tapered bars, Machine for rolling round.....	C. F. Brown.....	142,372	Sept. 2, 1873	46	16	4	246
Tapping gas and water fittings, Machine for.....	A. D. Laws.....	143,168	Sept. 23, 1873	736	{ 253 } 254	4	334
Tapping gas and water fittings, Machine for.....	C. C. Walworth.....	144,374	Nov. 4, 1873	167	56	4	492
Tapping pipe-fittings, Machine for.....	J. L. Pope.....	139,476	June 3, 1873	29	9	3	611
Tapping pipe-fittings, Machine for.....	E. Rogers.....	136,621	Mar. 11, 1873	253	85, 86	3	275
Tapping water-mains, Apparatus for.....	W. Young.....	136,950	Mar. 18, 1873	538	178	3	307
Tar, Apparatus for burning gas.....	A. Smith.....	142,357	Sept. 2, 1873	31	11, 12	4	245
Tassel.....	G. E. Jenkins.....	140,372	July 1, 1873	31	10	4	10
Tassel for canes and umbrellas.....	W. Harnach.....	140,825	July 15, 1873	432	147	4	63
Tassel-top.....	H. C. Lees.....	144,115	Oct. 28, 1873	680	225	4	464
Tatting-shuttle and crochet-needle, Combined.....	E. P. Kellogg.....	146,077	Dec. 30, 1873	956	309	4	709
Tea-kettle.....	N. Plympton.....	144,698	Nov. 18, 1873	459	156	4	538
Tea-kettle.....	C. D. Woodruff.....	136,576	Mar. 4, 1873	201	67	3	261
Teaching geography, Apparatus for.....	J. Schedler.....	143,934	Oct. 21, 1873	500	109	4	439
Teaching in schools, Apparatus for.....	M. McVicar.....	141,369	July 29, 1873	969	315	4	122
Teeth and gums, Depurator for the.....	J. D. Wingate.....	135,612	Feb. 4, 1873	211	65	3	143
Teeth, Artificial.....	W. C. Tracy.....	143,476	Oct. 7, 1873	65	23	4	386
Teeth, Artificial crown for.....	J. B. Beers.....	144,182	Nov. 4, 1873	5	2	4	479
Teeth, Device for retaining fillings in.....	E. Osmund.....	145,418	Oct. 7, 1873	22	8	4	382
Teeth, Filling for decayed.....	C. E. Blake.....	145,982	Dec. 30, 1873	876	.....	4	703
Teeth, Method of fastening artificial.....	G. F. C. Reese.....	144,699	Nov. 18, 1873	460	156	4	538
Telegraph and circuit therefor, Printing and dial.....	G. Little.....	139,690	June 10, 1873	230	74	3	644
Telegraph-apparatus.....	H. D. Rogers.....	142,486	Sept. 2, 1873	148	49	4	254
Telegraph-cable, Hydrostatic and electric.....	F. Tommasi.....	143,597	Oct. 14, 1873	183	62, 63	4	404
Telegraph, Chemical.....	T. A. Edison.....	141,774	Aug. 12, 1873	332	109	4	170
Telegraph-circuit, Automatic.....	T. A. Edison.....	141,773	Aug. 12, 1873	331	109	4	170
Telegraph-circuit, Automatic.....	T. A. Edison.....	141,776	Aug. 12, 1873	334	110	4	170
Telegraph-circuit, Automatic or chemical.....	T. A. Edison.....	141,772	Aug. 12, 1873	331	108	4	170
Telegraph, Circuit-closer and circuit for multiplex or interval.....	M. Gally.....	143,340	Sept. 30, 1873	891	305	4	363
Telegraph, Circuit for chemical.....	T. A. Edison.....	135,531	Feb. 4, 1873	125	40	3	137
Telegraph, Circuit for printing.....	T. A. Edison.....	140,489	July 1, 1873	124	43	4	18
Telegraph-circuit, Printing.....	L. T. Lindsey.....	143,700	Oct. 14, 1873	280	93	4	411
Telegraph cut-out.....	W. G. Linn.....	145,064	Dec. 2, 1873	23	8	4	587
Telegraph cut-out and switch.....	R. Henning.....	138,889	May 13, 1873	385	120	3	539
Telegraph, District and fire-alarm.....	J. H. Guest.....	143,344	Sept. 30, 1873	901	{ 306 } 307	4	364
Telegraph, District and fire-alarm.....	J. H. Guest.....	144,535	Nov. 11, 1873	313	{ 105 } 106	4	515
Telegraph, Duplex.....	J. B. Stearns.....	136,873	Mar. 18, 1873	472	{ 156 } 157	3	302
Telegraph, Duplex.....	J. B. Stearns.....	136,874	Mar. 18, 1873	473	157	3	302
Telegraph, Duplex.....	J. C. Wilson.....	136,400	Mar. 4, 1873	42	15	3	249
Telegraph, Electro-magnetic.....	G. D'Infreville.....	139,302	May 27, 1873	778	247	3	591
Telegraph, &c., Electro-magnetic motor for printing.....	L. T. Lindsey.....	136,329	Feb. 25, 1873	863	278	3	233
Telegraph, Fire-alarm.....	R. Carter.....	140,011	June 17, 1873	522	166	3	674
Telegraph-instrument, Automatic.....	T. A. Edison.....	134,867	Jan. 14, 1873	345	110	3	48
Telegraph-instrument, Duplex.....	J. B. Stearns.....	136,274	Feb. 25, 1873	818	264	3	229
Telegraph-instrument, Printing.....	T. A. Edison.....	134,866	Jan. 14, 1873	344	109	3	48
Telegraph-key.....	C. H. Billings and G. W. Stockly.....	144,730	Nov. 18, 1873	484	164	4	541
Telegraph key and sounder, Mechanical.....	D. L. Parkhurst.....	143,298	Sept. 30, 1873	857	293	4	360
Telegraph-key, Duplex.....	J. B. Stearns.....	136,875	Mar. 18, 1873	475	157	3	302
Telegraph-key, Self-closing.....	W. Hochhausen.....	144,274	Nov. 4, 1873	88	29	4	485
Telegraph-line, Subterranean.....	E. H. Austin.....	138,115	Apr. 22, 1873	771	246	3	453
Telegraph, Multiplex or interval.....	M. Gally.....	143,341	Sept. 30, 1873	894	{ 305 } 306	4	363
Telegraph, Perforator for automatic.....	T. A. Edison.....	141,775	Aug. 12, 1873	333	109	4	170
Telegraph, Perforator for automatic.....	G. Little.....	142,485	Sept. 2, 1873	147	48	4	254
Telegraph, Pneumatic.....	A. Jaynor.....	140,923	July 15, 1873	521	175	4	70
Telegraph-pole.....	J. L. Chapman.....	142,082	Aug. 26, 1873	637	209	4	213
Telegraph-pole.....	H. Dodge.....	140,255	June 24, 1873	755	238	3	701
Telegraph-pole.....	C. F. Howes.....	135,429	Feb. 4, 1873	35	10	3	130
Telegraph-pole.....	T. J. McCarver, J. Athey, and B. Jennings.....	139,593	June 3, 1873	129	43	3	619
Telegraph, Printing.....	G. L. Anders.....	144,045	Oct. 28, 1873	621	{ 205 } 206	4	459
Telegraph, Printing.....	T. A. Edison.....	138,869	May 13, 1873	367	114	3	537
Telegraph, Printing.....	T. A. Edison.....	138,870	May 13, 1873	368	114	3	538
Telegraph, Printing.....	T. A. Edison.....	139,128	May 20, 1873	605	189	3	570
Telegraph, Printing.....	T. A. Edison.....	139,129	May 20, 1873	606	190	3	570
Telegraph, Printing.....	T. A. Edison.....	140,487	July 1, 1873	121	41, 42	4	18
Telegraph, Printing.....	T. A. Edison.....	140,488	July 1, 1873	122	42	4	18
Telegraph, Printing.....	M. Gally.....	136,369	Mar. 4, 1873	14	5, 6	3	246
Telegraph, Printing.....	A. A. Knudson.....	140,143	June 24, 1873	662	208	3	694
Telegraph, Printing.....	L. T. Lindsey.....	143,702	Oct. 14, 1873	283	93, 94	4	411
Telegraph, Printing.....	G. M. Phelps.....	141,076	July 22, 1873	676	{ 226 } 227	4	92
Telegraph, Printing.....	G. M. Phelps.....	144,285	Nov. 4, 1873	94	31, 32	4	486

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Telegraph, Printing	C. J. Wiley	137, 117	Mar. 25, 1873	697	{ 231 232	{ 3	331
Telegraph, Railway	J. G. Smith	141, 604	Aug. 5, 1873	168	54	4	149
Telegraph receiving-register	M. F. Wessmann	142, 825	Sept. 16, 1873	453	153	4	301
Telegraph-register	W. H. Sawyer	145, 128	Dec. 2, 1873	83	27	4	592
Telegraph regulator, Printing	L. T. Lindsey	143, 701	Oct. 14, 1873	282	93	4	411
Telegraph relay and sounder	J. B. Stearns	136, 876	Mar. 18, 1873	475	158	3	302
Telegraph-relay, Self-adjusting	J. H. Stombs	144, 157	Oct. 28, 1873	713	238	4	467
Telegraph-repeater	L. T. Lindsey	136, 251	Feb. 25, 1873	795	258	3	227
Telegraph, Repeater for duplex	J. B. Stearns	134, 776	Jan. 14, 1873	263	86	3	41
Telegraph-sounder	M. W. Goodyear	140, 266	June 24, 1873	764	241	3	702
Telegraph-sounder	H. Van Hoevenburgh	141, 966	Aug. 19, 1873	511	168	4	194
Telegraph switch-board	W. D. Sargent	142, 817	Sept. 16, 1873	446	151	4	300
Telegraph-transmitter	D. Hermann	145, 567	Dec. 16, 1873	484	158	4	648
Telegraph, Transmitter and receiver for automatic	G. Little	142, 484	Sept. 2, 1873	145	47, 48	4	253
Telegraph, Transmitter for printing	L. T. Lindsey	136, 250	Feb. 25, 1873	793	257	3	227
Telegraph transmitting-key	M. F. Wessmann	142, 826	Sept. 16, 1873	454	153	4	301
Telegraph-wire, Protection for underground	E. D. Pritchard	144, 135	Oct. 28, 1873	695	231	4	465
Telegraphic apparatus for automatic signaling	W. Unger and H. E. Towle	144, 643	Nov. 18, 1873	414	{ 139 140	{ 4	535
Telegraphs, Unison-stop for printing	C. J. Wiley	144, 812	Nov. 18, 1873	553	188	4	546
Tempering castings, &c., Furnace for	W. M. Watson	143, 548	Oct. 7, 1873	136	45	4	391
Tempering steel plates, &c., Apparatus for	H. Urban	141, 837	Aug. 12, 1873	389	127	4	174
Tender and car frame, Iron	J. W. Goff	137, 436	Apr. 1, 1873	140	46	3	368
Tenoning and boring machine	G. Witler	140, 754	July 8, 1873	366	124	4	49
Tenoning-machine	M. Buck	136, 211	Feb. 25, 1873	761	246	3	225
Tenoning-machine	J. Richards	144, 411	Nov. 11, 1873	209	70	4	507
Tenoning-machine	J. Richards and L. H. Berry	143, 532	Oct. 7, 1873	116	39	4	390
Tenoning-machine	W. M. Sack	143, 848	Oct. 21, 1873	434	144	4	434
Tenoning machine, Cog	S. W. Long	145, 992	Nov. 25, 1873	715	242	4	571
Tent	J. B. Smith	143, 037	Sept. 23, 1873	636	218	4	326
Tent	E. M. Turner	137, 579	Apr. 8, 1873	280	86	3	391
Tent-frame	W. W. Whitcomb	138, 774	May 13, 1873	284	88	3	531
Tent-ventilator pipe-hole plate	R. and W. Brien	144, 054	Oct. 28, 1873	631	208	4	460
Terret and martingale ring	J. Geraghty	141, 502	Aug. 5, 1873	83	26	4	142
Testing-plug	J. Allin	144, 881	Nov. 25, 1873	625	212	4	563
Textile fabric, Machine for piling	A. Warth	137, 041	Mar. 18, 1873	618	{ 204 205	{ 3	313
Textile fabric, Machine for piling	A. Warth	137, 518	Apr. 1, 1873	219	67	3	374
Thermoscope	G. F. Barker and A. M. Mayer	142, 190	Aug. 26, 1873	727		4	221
Thermostat, Electrical	J. H. Guest	139, 953	June 17, 1873	477	150	3	670
Thill-coupling	J. C. Barrett	144, 497	Nov. 11, 1873	280	95	4	513
Thill-coupling	W. R. Bowman	145, 390	Dec. 9, 1873	315	106	4	623
Thill-coupling	W. Cable	137, 176	Mar. 25, 1873	749	248	3	335
Thill-coupling	G. R. Davis	142, 211	Aug. 26, 1873	746	245	4	222
Thill-coupling	S. J. Dibble	134, 981	Jan. 21, 1873	454	145	3	72
Thill-coupling	G. M. Dunlap	145, 635	Dec. 16, 1873	540	177	4	653
Thill-coupling	G. W. Hobart	138, 087	Apr. 22, 1873	750	237	3	452
Thill-coupling	C. F. Kidder	140, 833	July 15, 1873	438	149	4	63
Thill-coupling	H. B. Kinney	143, 162	Sept. 23, 1873	731	252	4	334
Thill-coupling	J. Low	136, 078	Feb. 18, 1873	633	208	3	203
Thill-coupling	P. L. Maltbie	141, 655	Aug. 12, 1873	231	72	4	162
Thill-coupling	H. Manwaring	145, 516	Dec. 16, 1873	441	144	4	645
Thill-coupling	J. Martin	137, 143	Mar. 25, 1873	719	238	3	332
Thill-coupling	J. H. Parkhurst	139, 022	May 20, 1873	506	159	3	562
Thill-coupling	A. J. Patterson	140, 382	July 1, 1873	40	13	4	11
Thill-coupling	J. M. Pusey	143, 929	Oct. 21, 1873	496	168	4	439
Thill-coupling	B. R. Rapp	142, 274	Aug. 26, 1873	797	263	4	227
Thill-coupling	W. C. Shipherd and E. P. Curtiss	138, 702	May 6, 1873	207	65	3	514
Thill-coupling	J. C. Thompson	143, 596	Oct. 14, 1873	182	62	4	404
Thill-coupling	S. G. Wise	142, 830	Sept. 16, 1873	458	155	4	301
Thill-coupling attachment	H. J. Stubbs	142, 960	Sept. 16, 1873	567	192	4	311
Thill-coupling clamp	M. Taylor	141, 901	Aug. 19, 1873	461	150	4	189
Thill-holder	J. P. Hisley	140, 705	July 8, 1873	324	110	4	46
Thill, Vehicle	A. Muhleisen	144, 558	Nov. 11, 1873	334	113	4	517
Thimble	W. P. Slensby	138, 445	Apr. 29, 1873	1, 092	345	3	487
Thrasher, Rewinnowing-attachment for	J. B. Padon	136, 175	Feb. 25, 1873	735	237	3	223
Thrashing and hulling machine, Clover	I. T. Barton	138, 366	Apr. 29, 1873	1, 021	{ 321 322	{ 3	482
Thrashing and hulling machine, Clover	J. Bradley and J. Nicholas	138, 556	May 6, 1873	80	26	3	504
Thrashing-machine	I. T. Barton	139, 355	May 27, 1873	816	261	3	595
Thrashing-machine	L. C. Bickings	139, 857	June 17, 1873	393	123	3	663
Thrashing-machine	M. G. Carleton	139, 866	June 17, 1873	403	126	3	664
Thrashing-machine	J. Crowley	141, 428	Aug. 5, 1873	17	4	4	136
Thrashing-machine	J. Ellis, N. Hoffman, and J. Lee	140, 491	July 1, 1873	125	43	4	18
Thrashing-machine	P. Geiser	141, 783	Aug. 12, 1873	342	113	4	171
Thrashing-machine	A. G. Hagerström	142, 462	Sept. 2, 1873	125	41	4	252
Thrashing-machine	C. S. Hall	136, 238	Feb. 25, 1873	782	253	3	226
Thrashing-machine	A. Johnston	134, 891	Jan. 14, 1873	365	116	3	49
Thrashing-machine	D. O. B. Ladd	134, 901	Jan. 14, 1873	375	119	3	50
Thrashing-machine	D. Lippy and J. S. Blymer	137, 695	Apr. 8, 1873	380	{ 117 118	{ 3	399
Thrashing-machine	R. H. Martindale	141, 153	July 22, 1873	747	246	4	97
Thrashing-machine	C. M. Powers	137, 863	Apr. 15, 1873	537	167	3	425
Thrashing-machine	J. Smith	144, 874	Nov. 25, 1873	621	211	4	562
Thrashing-machine	J. B. Suitt	142, 961	Sept. 16, 1873	568	192	4	311
Thrashing-machine	F. R. and W. O. Sutton	140, 440	July 1, 1873	81	28	4	15
Thrashing-machine	W. Verill	141, 526	Aug. 5, 1873	100	31	4	143
Thrashing-machine	H. Wehler	139, 218	May 20, 1873	687	216	3	577
Thrashing-machine	A. Wemple	137, 809	Apr. 15, 1873	492	154	3	421
Thrashing-machine	J. M. Wilders	144, 721	Nov. 18, 1873	476	161	4	540
Thrashing-machine, Band-cutter and feeder for	J. Sullivan and J. Minks	140, 658	July 8, 1873	283	96	4	43
Thrashing-machine, Band-cutter platform for	J. A. Walsh	135, 678	Feb. 11, 1873	276	87	3	161
Thrashing-machine, Concave for	L. C. Bickings	145, 044	Dec. 2, 1873	2	1	4	586
Thrashing-machine dust-conveying attachment	J. Bierbower	139, 289	May 27, 1873	768	243	3	590

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Thrashing-machine sacking-attachment.....	W. Masterton.....	139, 073	May 20, 1873	555	174	3	566
Thrashing-machine separator.....	G. W. Howe.....	134, 671	Jan. 7, 1873	163	54	3	19
Thrashing-machine separator.....	H. H. Kurtz.....	135, 821	Feb. 11, 1873	405	131	3	171
Thrashing-machine separator.....	S. R. Perkins.....	143, 588	Oct. 14, 1873	177	60	4	403
Thrashing-machine, Straw-conveyor for.....	C. D. Decker.....	141, 858	Aug. 19, 1873	415	135	4	186
Thrashing-machine straw-stacking attachment.....	W. Carr.....	138, 612	May 6, 1873	124	41	3	508
Thrashing-power, Traveling.....	R. W. Faris.....	142, 621	Sept. 9, 1873	272	89	4	276
Thread-cutter.....	M. J. Pitrat.....	141, 235	July 29, 1873	839	274	4	112
Thread-dressing and winding machine.....	J. Short.....	139, 521	June 3, 1873	65	22	3	614
Thread-evenner.....	J. B. Meldrum.....	140, 215	June 24, 1873	723	227	3	699
Thread-making machine, Double-tapered.....	G. V. Sheffield.....	137, 033	Mar. 18, 1873	610	202	3	313
Ticket-book, Railway-fare.....	T. A. Jebb and L. Brush.....	137, 209	Mar. 25, 1873	783	258	3	337
Ticket-box for railway-car.....	G. C. Thomas.....	145, 030	Nov. 25, 1873	750	253	4	573
Ticket-box for railway-car.....	G. C. Thomas.....	146, 108	Dec. 30, 1873	987	319	4	712
Ticket-case.....	L. J. Blades.....	145, 388	Dec. 9, 1873	314	103	4	623
Ticket-case.....	J. Stokes, jr.....	144, 420	Nov. 11, 1873	221	73	4	508
Ticket, Duplex.....	T. A. Jebb.....	137, 081	Mar. 18, 1873	668	221	3	328
Ticket, Duplex-railway.....	T. A. Jebb.....	137, 208	Mar. 25, 1873	782	258	3	337
Ticket-holder, Railway.....	J. C. Maloy.....	143, 517	Oct. 7, 1873	99	35	4	389
Ticket printing and registering apparatus.....	J. Dyer.....	141, 336	July 29, 1873	931	303 304 305	4	120
Tidy-pin.....	G. Doolittle.....	144, 325	Nov. 4, 1873	127	42	4	489
Tie: <i>See</i> Bag-tie. Bale-tie. Neck-tie. Railway-tie.							
Tile, Drain.....	J. Leffler.....	145, 990	Nov. 25, 1873	713	241	4	570
Tile, Fire-proof illuminating.....	T. Hyatt.....	145, 182	Dec. 2, 1873	135	44	4	596
Tile-machine.....	C. J. Merrill.....	142, 576	Sept. 9, 1873	236	77	4	273
Till-alarm.....	J. F. Baldwin.....	139, 530	June 3, 1873	73	25	3	615
Till-alarm.....	J. F. Baldwin.....	139, 939	June 17, 1873	467	146	3	669
Till-alarm.....	J. F. Baldwin.....	145, 777	Dec. 23, 1873	676	221	4	676
Till-alarm.....	G. L. Geiger.....	142, 012	Aug. 19, 1873	551	182	4	197
Till-alarm.....	W. Malick.....	145, 514	Dec. 16, 1873	439	143	4	644
Till-alarm.....	E. O. Wood.....	145, 824	Dec. 23, 1873	711	234	4	679
Tilting-chair.....	J. Enger.....	144, 603	Nov. 18, 1873	378	127	4	532
Tilting-chair.....	F. A. Parker.....	137, 091	Mar. 25, 1873	675	224	3	329
Tilting-chair.....	E. N. Tuttle.....	138, 544	May 6, 1873	67	23	3	503
Tilting-chair.....	G. C. Winchester.....	138, 461	Apr. 29, 1873	1, 106	349	3	488
Tilting-gate.....	J. Bartholf.....	141, 027	July 22, 1873	633	213	4	88
Tilting-machine.....	G. J. Smale.....	135, 250	Jan. 28, 1873	714	228	3	105
Timber and loading vessels therewith, Means of raising floating.	A. Bulman.....	143, 873	Oct. 21, 1873	453	152	4	435
Time-check, Watchman's.....	T. Hahn.....	138, 084	Apr. 22, 1873	748	236	3	451
Tin can, Air-tight.....	J. W. Wright.....	136, 949	Mar. 18, 1873	538	178	3	307
Tin cans, Machine for severing.....	H. T. Vaders.....	145, 260	Dec. 2, 1873	199	69	4	601
Tin cans, Sheet for forming the body of square or rectangular.	J. Bowers.....	134, 726	Jan. 14, 1873	224	72	3	38
Tin from waste tin-scrap, Recovering.....	H. Panton.....	137, 712	Apr. 8, 1873	396	123	3	401
Tin-scrap and obtaining useful products, Treating.....	H. Panton.....	135, 578	Feb. 4, 1873	173	55	3	141
Tinned sheet-iron, Restoring.....	W. E. Brockway.....	141, 109	July 22, 1873	706	.....	4	94
Tinner's clippings, Treating.....	F. G. Morton.....	136, 532	Mar. 4, 1873	162	.....	3	258
Tip-chair.....	B. A. Carlan.....	134, 850	Jan. 14, 1873	330	105	3	46
Tipping-chair.....	H. K. White.....	139, 639	June 3, 1873	171	56	3	623
Tire-bender.....	J. Tomlinson.....	135, 498	Feb. 4, 1873	95	30	3	135
Tire-bending machine.....	F. E. Coleman.....	138, 231	Apr. 29, 1873	897	283	3	472
Tire-heater.....	F. Strattnr.....	138, 952	May 13, 1873	434	136	3	543
Tire-heater.....	R. F. Thompson.....	143, 041	Sept. 23, 1873	641	220	4	327
Tire-heating furnace.....	J. G. Rogers.....	143, 465	Oct. 7, 1873	57	20	4	385
Tire-tightener.....	W. Bellairs and W. Ough.....	144, 729	Nov. 18, 1873	483	164	4	540
Tire-tightener.....	M. E. Jacobs.....	142, 633	Sept. 9, 1873	281	92	4	276
Tire-tightener.....	W. D. G. Quigley.....	137, 957	Apr. 15, 1873	614	193	3	431
Tire-upsetting machine.....	D. L. Badley.....	141, 687	Aug. 12, 1873	259	84	4	164
Tire-upsetting machine.....	R. Gibbs.....	142, 455	Sept. 2, 1873	118	38	4	252
Tire-upsetting machine.....	C. J. Peterson.....	136, 455	Mar. 4, 1873	86	30	3	252
Tire-upsetting machine.....	J. L. and A. H. Yeager.....	142, 833	Sept. 16, 1873	460	156	4	301
Tobacco and match box, Combined.....	C. Remhof.....	135, 488	Feb. 4, 1873	88	27	3	134
Tobacco, Apparatus for pressing and packing.....	J. K. Earickson and J. R. Harris.....	136, 225	Feb. 25, 1873	771	249	3	226
Tobacco-box, Machine for recessing.....	I. M. Reames.....	138, 193	Apr. 22, 1873	843	266	3	459
Tobacco-case.....	J. W. Stone.....	140, 093	June 17, 1873	600	189	3	680
Tobacco, Curing.....	G. D. Culp.....	135, 468	Feb. 4, 1873	70	.....	3	133
Tobacco-cutter, Self-cleaning.....	W. J. Faul.....	140, 693	July 8, 1873	314	106	4	45
Tobacco-cutting machine.....	N. H. Borgfeldt.....	138, 606	May 6, 1873	119	39	3	507
Tobacco-cutting machine.....	F. S. Kinney.....	140, 203	June 24, 1873	713	225	3	698
Tobacco-dryer.....	J. M. Smith.....	139, 977	June 17, 1873	494	156	3	672
Tobacco-drying house.....	E. W. Ellsworth.....	144, 194	Nov. 4, 1873	21	6	4	480
Tobacco-finisher.....	A. P. Southard.....	139, 742	June 10, 1873	287	89	3	648
Tobacco, Flavoring, coating, and putting up.....	J. Kerr.....	137, 084	Mar. 18, 1873	671	.....	3	328
Tobacco for packing, Shaping and arranging.....	J. K. Earickson and J. R. Harris.....	135, 897	Feb. 18, 1873	481	155	3	191
Tobacco-hanger.....	D. C. Burr and J. A. Johnson.....	144, 503	Nov. 11, 1873	285	97	4	513
Tobacco-hanger.....	E. Kempshall.....	139, 718	June 10, 1873	263	82	3	646
Tobacco-hanging hook.....	H. N. Strong.....	141, 899	Aug. 19, 1873	459	150	4	189
Tobacco-hiller.....	Z. D. Blakistone.....	136, 897	Mar. 18, 1873	494	164	3	303
Tobacco-knife.....	I. S. Goldman.....	143, 900	Oct. 21, 1873	474	159	4	437
Tobacco-leaves, Machine for cleaning and repairing.....	J. L. Jones.....	141, 563	Aug. 5, 1873	134	42	4	146
Tobacco, Machine for manufacturing plug.....	J. L. Jones.....	141, 562	Aug. 5, 1873	133	42	4	146
Tobacco, Manufacture of plug and bunch.....	I. Eppinger.....	136, 312	Feb. 25, 1873	848	274	3	231
Tobacco-package.....	E. L. Felgner.....	136, 984	Mar. 18, 1873	566	189	3	309
Tobacco-package.....	G. Robinson.....	145, 451	Dec. 9, 1873	366	122	4	627
Tobacco packing and preserving box.....	L. Wertheimer.....	139, 747	June 10, 1873	292	90	3	648
Tobacco packing, wrapping, and labeling machine.....	J. H. Trowbridge.....	143, 545	Oct. 7, 1873	127	43, 44	4	391
Tobacco-pipe, Compound for use in.....	W. E. Turner.....	134, 713	Jan. 7, 1873	199	65	3	22

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Tobacco-plant cutter	J. N. Cady	137,760	Apr. 15, 1873	451	140	3	418
Tobacco, Plug and bunch	I. Eppinger	140,020	June 17, 1873	532	168	3	675
Tobacco-pouch	D. Read	136,457	Mar. 4, 1873	88	30	3	253
Tobacco-press	D. La Du	135,648	Feb. 11, 1873	249	78	3	159
Tobacco-press	F. J. Witovec	138,549	May 6, 1873	73	24	3	504
Tobacco-press, Box-clamp for	T. I. Robertson	144,142	Oct. 28, 1873	702	233	4	466
Tobacco, Process for treating	J. A. Stafford and H. C. Fowler	136,872	Mar. 18, 1873	471		3	301
Tobacco-ridger	J. R. Whittemore	142,753	Sept. 9, 1873	385	129	4	285
Tobacco-rolling machine	D. W. De Forest	139,375	May 27, 1873	830	266	3	596
Tobacco shearing and booking machine	I. W. Bisbing and J. S. McCune	137,170	Mar. 25, 1873	743	247	3	334
Tobacco-stripping machine	J. R. Tunnell and J. L. Thomson	145,699	Dec. 16, 1873	596	195	4	658
Tobacco-topper	J. S. Ackley and D. S. Ranney	135,305	Jan. 28, 1873	756	244	3	108
Toe-nails, Clasp for preventing ingrowing of	E. E. Stedman	137,106	Mar. 25, 1873	688	229	3	330
Toilet-cabinet, Lady's	J. C. Vetter	140,324	June 24, 1873	819	{ 259 260 }	{ 3 3 }	707
Toilet-comb	I. S. and J. W. Hyatt	135,918	Feb. 18, 1873	497	162	3	192
Toilet-rack	O. H. Cooke and F. Kenfield	143,501	Oct. 7, 1873	88	30	4	387
Toilet-stand	D. Sherwood	138,538	May 6, 1873	63	21	3	502
Tomatoes, Drying	M. P. Smith	137,327	Apr. 1, 1873	48		3	361
Tongs, Clothes	E. A. Foulke	144,972	Nov. 25, 1873	697	235	4	569
Tongs, Culinary	A. Greenleaf	145,564	Dec. 16, 1873	482	157	4	648
Tongs, Fire	C. Swett	139,832	June 10, 1873	366	113	3	654
Tongs, Flooring	E. J. Houston	135,916	Feb. 18, 1873	496	161	3	192
Tongs for lifting fruit-cans	A. H. Johnson	134,604	Jan. 7, 1873	101	32	3	15
Tongs, Gripping	W. J. Hallefas	134,798	Jan. 14, 1873	282	91	3	43
Tongs, Gutting	J. Schwartz	139,198	May 20, 1873	672	210	3	575
Tongs, Hog	H. W. Hill	145,105	Dec. 2, 1873	61	20	4	590
Tongs, Ice	W. T. Farre	136,593	Mar. 11, 1873	231	78	3	273
Tongs, Ice	E. C. Johnson	142,916	Sept. 16, 1873	526	179	4	307
Tongs, Oyster	I. Smith	135,167	Jan. 21, 1873	612	199	3	84
Tongs, Pipe	J. R. Brown	142,143	Aug. 26, 1873	691	227	4	218
Tongs, Pipe	J. R. Brown	144,253	Nov. 4, 1873	72	23	4	484
Tongs, Pipe	J. R. Brown	145,929	Dec. 30, 1873	827	269	4	699
Tongs, Pipe	A. H. Jarecki	138,161	Apr. 22, 1873	809	257	3	456
Tongs, Pipe	F. H. Merrill	139,174	May 20, 1873	650	203	3	573
Tool	J. H. Baker, A. Doney, and F. N. Owen	145,830	Dec. 23, 1873	716	235	4	680
Tool, Combination	T. Williams	138,548	May 6, 1873	73	24	3	503
Tool, Compound	J. Dillon	145,992	Dec. 30, 1873	883	276	4	703
Tool, Compound	F. W. Farrar	142,782	Sept. 16, 1873	420	142	4	298
Tool, Compound	E. Omensetter and J. F. Parker	138,683	May 6, 1873	192	61	3	513
Tool-handle	W. B. Hill	142,568	Sept. 9, 1873	229	75	4	272
Tool-handle	W. H. McCoy	138,423	Apr. 29, 1873	1,074	338	3	486
Tool-handle	S. F. Streeter	145,252	Dec. 2, 1873	192	66	4	600
Tool-holder	L. L. Lamb	135,715	Feb. 11, 1873	308	98	3	164
Tool-holder	I. F. Murch	136,450	Mar. 4, 1873	83	28	3	252
Tool-receptacle	L. L. Lamb	141,934	Aug. 19, 1873	488	161	4	192
Tools, Combined	W. Bartle	136,693	Mar. 11, 1873	312	103	3	279
Tools, Process of hardening edge	L. W. Stuart	140,390	July 1, 1873	46		4	12
Tooth-plugger	T. L. Buckingham	142,205	Aug. 26, 1873	741	244	4	222
Top, Spinning	J. Spencer	141,089	July 22, 1873	687	231	4	92
Torch and fire-lighter, Combined	P. Ryan	135,592	Feb. 4, 1873	189	59	3	142
Torch, Gas-lighting	C. H. Roberts	136,006	Feb. 18, 1873	570	188	3	198
Torpedo	C. Nelson	136,000	Feb. 18, 1873	565	186	3	198
Torpedo for oil-well	A. Hamar	137,198	Mar. 25, 1873	772	255	3	336
Torpedo for oil-well	A. Hamar	137,916	Apr. 15, 1873	582	183	3	429
Torpedo, Self-tamping	S. A. Briggs	138,373	Apr. 29, 1873	1,026	323	3	482
Torpedo, Self-tamping	M. Gotham	137,196	Mar. 25, 1873	771	254	3	336
Torsion-spring, Vehicle	R. Dudley	137,899	Apr. 15, 1873	569	179	3	428
Towel and clothes rack	L. M. Fitch	137,904	Apr. 15, 1873	573	180	3	428
Towel, Medicated	L. Stewart	136,466	Mar. 4, 1873	98		3	253
Towel-rack	J. Rearden	137,960	Apr. 15, 1873	617	194	3	432
Towel-rack	C. Schermerhorn	145,367	Dec. 9, 1873	294	99	4	621
Towel-rack and boot-jack combined	C. Darnstaedt	139,551	June 3, 1873	92	31	3	616
Toy	J. J. Arnaud	141,414	Aug. 5, 1873	3	1	4	135
Toy	C. Ball	138,365	Apr. 29, 1873	1,020	321	3	481
Toy	A. R. Batchelder	139,533	June 3, 1873	76	26	3	615
Toy	L. Bryan	140,402	July 1, 1873	54	19	4	12
Toy	M. Grebner	139,783	June 10, 1873	324	101	3	651
Toy	F. Hubbard and E. B. Severance	138,401	Apr. 29, 1873	1,049	330	3	484
Toy	H. T. Lee	140,206	June 24, 1873	715	225	3	698
Toy	R. G. Messinger	141,009	July 22, 1873	617	208	4	87
Toy	T. Morley	138,038	Apr. 22, 1873	708	224	3	448
Toy	J. Schwennesen	140,649	July 8, 1873	277	94	4	42
Toy	W. R. Withers	137,119	Mar. 25, 1873	700	232	3	331
Toy, Automatic	H. L. Brower	140,883	July 15, 1873	479	162	4	66
Toy, Automatic	A. W. Browne	135,770	Feb. 11, 1873	353	113	3	167
Toy, Automatic	A. H. Dean	144,892	Nov. 25, 1873	632	215	4	563
Toy, Automatic swimmer	I. F. Eaton	140,259	June 24, 1873	758	239	3	702
Toy, Automaton	R. J. Clay	140,765	July 15, 1873	379	130	4	58
Toy-block	H. Fairbanks	135,417	Feb. 4, 1873	23	7	3	129
Toy-blocks for object-teaching	N. Muller	143,835	Oct. 21, 1873	422	140	4	433
Toy building-block	A. Oberndorf, jr.	144,124	Oct. 28, 1873	687	227	4	465
Toy-catapult	W. S. How	140,922	July 15, 1873	519	{ 174 175 }	{ 4 4 }	70
Toy-dancer, Automatic	H. L. Brower	143,121	Sept. 23, 1873	704	241	4	332
Toy-dancer, Automatic	W. A. P. La Grove	143,082	Sept. 23, 1873	673	232	4	329
Toy-device for making soap-bubbles	S. B. Bliss	143,432	Oct. 7, 1873	32	11	4	383
Toy-gun	A. James	137,080	Mar. 18, 1873	667	221	3	328
Toy-gun	W. Mills and D. J. Wolfe	145,745	Dec. 23, 1873	648	212	4	674
Toy-gun	R. Y. Murphy	143,457	Oct. 7, 1873	50	18	4	385
Toy-gymnast	F. A. Bancker	144,651	Nov. 18, 1873	423	142	4	535
Toy, Gyroscopic	A. C. Würtele	139,988	June 17, 1873	502	159	3	672
Toy-horn	W. A. Harwood	144,026	Oct. 28, 1873	607	201	4	458

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Toy-house	J. B. Smith	138, 208	Apr. 22, 1873	854	270	3	460
Toy money-box	R. Frisbie	140, 358	July 1, 1873	21	7	4	10
Toy money-box	J. Hall	145, 734	Dec. 23, 1873	639	209	4	673
Toy money-box	C. C. Johnson	144, 106	Oct. 28, 1873	674	223	4	463
Toy money-box	H. W. Prouty	141, 516	Aug. 5, 1873	93	29	4	143
Toy money-box	T. A. Taylor	140, 798	July 15, 1873	406	138	4	61
Toy-perambulator	J. S. Krinks	137, 693	Apr. 8, 1873	378	117	3	399
Toy-pistol	O. W. Horr	139, 391	May 27, 1873	852	273	3	598
Toy-pistol	H. M. Quackenbush	145, 238	Dec. 2, 1873	179	62	4	599
Toy-pistol or gun	G. S. Hastings	145, 798	Dec. 23, 1873	692	227	4	678
Toy-propeller	G. W. Jones	144, 767	Nov. 18, 1873	517	175	4	543
Toy putty-blower	N. Joseph	145, 109	Dec. 2, 1873	63	21	4	590
Toy-puzzle	B. F. Ellis	136, 645	Mar. 11, 1873	274	92	3	276
Toy-velocipede	W. Sellers	135, 851	Feb. 11, 1873	428	139	3	173
Toy-whistle	J. Waters	143, 044	Sept. 23, 1873	644	221	4	327
Trace-carrier	R. H. Warriner	135, 951	Feb. 18, 1873	524	171	3	194
Trace-detacher	W. H. Stimely	138, 706	May 6, 1873	211	67	3	514
Trace, Eyelet for harness	N. Hiatt	144, 096	Oct. 28, 1873	665	219	4	463
Trace-fastening	F. M. Snively	139, 432	May 27, 1873	891	287	3	600
Trace, Harness	R. Williams	145, 708	Dec. 16, 1873	605	197	4	658
Traces, Eyelet for harness	S. Walters	136, 796	Mar. 11, 1873	398	132	3	286
Track-cleaner	A. J. Gove	134, 660	Jan. 7, 1873	154	51	3	19
Track-clearer	E. Abbiati	144, 724	Nov. 18, 1873	479	163	4	540
Track-clearer	F. Bu e	145, 090	Dec. 2, 1873	49	15	4	589
Track-clearer	J. H. Miller	138, 913	May 13, 1873	403	127	3	540
Track-lifter	G. J. Kinzel	140, 713	July 8, 1873	330	112	4	46
Traction-engine	D. H. Ball	139, 997	June 17, 1873	510	162	3	673
Traction-engine	N. M. Mendenhall	144, 467	Nov. 11, 1873	255	86	4	511
Traction-engine	L. Perkins	143, 028	Sept. 23, 1873	629	{ 214 } { 215 }	{ 4 }	326
Traction or portable engine	D. W. Kellogg	135, 128	Jan. 21, 1873	581	189	3	82
Traction-wheel	W. E. Bartlett	138, 469	May 6, 1873	4	2	3	498
Traction-wheel	J. G. Gallet	139, 711	June 10, 1873	255	80	3	645
Traction-wheel	O. Hyde	138, 404	Apr. 29, 1873	1, 051	331	3	484
Traction-wheel	C. H. Perkins	138, 578	May 6, 1873	99	32	3	506
Traction-wheel	H. T. Stith	138, 707	May 6, 1873	212	67	3	514
Traction-wheel	J. V. Strait	136, 677	Mar. 11, 1873	301	100	3	278
Tram-way, Plate for	S. D. Tillman	146, 033	Dec. 30, 1873	917	297	4	706
Transom lifter and lock	J. F. Wollensak	136, 801	Mar. 11, 1873	403	133	3	287
Transplanter	J. P. Stanton and R. C. Pedrick	134, 775	Jan. 14, 1873	262	86	3	41
Transplanter, Tobacco	C. E. Bates	140, 806	July 15, 1873	414	140	4	61
Trap:							
<i>See</i> Animal-trap.							
Animal and insect trap.							
Animal cage-trap.							
Ant-trap.							
Bed-bug trap.							
Fish-trap.							
Fly-trap.							
Hog-trap.							
Insect-trap.							
Mole-trap.							
Pigeon-trap.							
Pipe-trap.							
Rat-trap.							
Sewer-trap.							
Sewer-gas trap.							
Sewer inlet-trap.							
Sink-trap.							
Steam-trap.							
Steam-pipe trap.							
Stench-trap.							
Waste-trap.							
Water-trap.							
Traveling-bag	R. Schmitt	135, 596	Feb. 4, 1873	192	60	3	142
Traveling-bag frame, Manufacture of	J. B. and C. F. Blakslee	137, 339	Apr. 1, 1873	58	17	3	361
Traveling-bags, Manufacture of	J. W. Lieb	144, 340	Nov. 4, 1873	139	46	4	490
Tray, Fruit-drying	G. W. Stevens	137, 502	Apr. 1, 1873	206	63	3	374
Tray or show board	D. H. Klotz	134, 898	Jan. 14, 1873	371	118	3	50
Treadle	J. B. Bolinger	136, 810	Mar. 18, 1873	424	140	3	298
Treadle	W. Felzer	144, 525	Nov. 11, 1873	304	102	4	514
Treadle	L. Heins	143, 902	Oct. 21, 1873	476	160	4	437
Treadle	G. B. Kirkham	136, 603	Mar. 11, 1873	237	80	3	273
Treadle	J. H. Osborn	137, 090	Mar. 18, 1873	674	224	3	329
Treadle	J. Tisdale, J. Putnam, and H. N. Allen	143, 543	Oct. 7, 1873	125	42	4	391
Treadle-mechanism	B. B. Chandler	142, 770	Sept. 16, 1873	409	138	4	297
Treadle-movement	J. Evans	139, 305	May 27, 1873	782	248	3	592
Tree-protector	C. Ayers	135, 685	Feb. 11, 1873	285	89	3	162
Tree-protector	G. H. Hume	141, 716	Aug. 12, 1873	281	92	4	166
Tree-protector	J. Neff	145, 585	Dec. 16, 1873	498	164	4	650
Trenches, Extensible brace for supporting	S. G. McKiernan	145, 116	Dec. 2, 1873	71	22	4	591
Trenches, Extensible brace for supporting	W. Reilly	145, 126	Dec. 2, 1873	82	27	4	592
Trestle	M. M. Lucky	141, 228	July 29, 1873	832	272	4	111
Trimmer:							
<i>See</i> Cigar-trimmer.							
Edge-trimmer.							
Hedge-trimmer.							
Lamp-wick trimmer.							
Road-trimmer.							
Trimming	O. M. Chamberlain	137, 344	Apr. 1, 1873	62	19	3	362
Trimming	W. Murray	137, 857	Apr. 15, 1873	533	166	3	425
Trimming	W. Murray	137, 858	Apr. 15, 1873	534	166	3	425
Trimming	W. Murray	144, 031	Oct. 28, 1873	611	202	4	458
Trimming	W. Murray	144, 032	Oct. 28, 1873	611	202	4	458

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Trimming	W. Murray	144,033	Oct. 28, 1873	612	202	4	458
Trimming	J. Thomas	140,174	June 24, 1873	690	217	3	696
Trimming	W. Walker	144,807	Nov. 18, 1873	550	187	4	546
Trolling-spoon	W. Harper and W. Smith	143,146	Sept. 23, 1873	721	248	4	333
Trough:							
<i>See</i> Eaves-trough.							
Grindstone-trough.							
Horse-trough.							
Wagon-extension trough.							
Trowel	S. F. Streeter	136,878	Mar. 18, 1873	478	158	3	302
Truck	J. Chisholm and J. C. Mayer	135,205	Jan. 28, 1873	667	215	3	101
Truck	H. Pratt and T. T. Munhall	145,967	Dec. 30, 1873	863	280	4	702
Truck	M. L. Senderling	135,247	Jan. 28, 1873	713	228	3	105
Truck, Barrel	V. Bell	135,309	Jan. 28, 1873	759	245	3	109
Truck, Changeable-gage car	W. W. Whitaker	142,751	Sept. 9, 1873	383	128	4	284
Truck, Changeable-gage railway	J. McCauley	137,308	Apr. 1, 1873	26	8	3	359
Truck, Dumping	F. H. Abeel	141,098	July 22, 1873	696	234	4	93
Truck for carrying bricks	R. A. Smith	143,853	Oct. 21, 1873	439	146	4	434
Truck for carrying safes, &c.	F. Luehmann and C. Roehl	141,653	Aug. 12, 1873	228	72	4	161
Truck for moving buildings	T. J. Reamy	134,930	Jan. 14, 1873	399	127	3	52
Truck for moving buildings	W. E. Walker	134,950	Jan. 14, 1873	417	133	3	53
Truck for transporting railway-rails, car-axles, &c.	C. A. Ball	142,759	Sept. 16, 1873	401	135	4	296
Truck, Hand	N. Adams	145,268	Dec. 9, 1873	213	73	4	615
Truck, Hand	J. J. Collingbourne	135,889	Feb. 18, 1873	476	153	3	191
Truck, Hand	L. Gilson	134,537	Jan. 7, 1873	31	10	3	10
Truck, Hand	H. S. La Tourette	137,086	Mar. 18, 1873	672	223	3	329
Truck, Piano	C. A. French	142,386	Sept. 2, 1873	60	20	4	247
Truck, Railway	J. W. Bower	135,762	Feb. 11, 1873	345	111	3	167
Truck, Railway-car	J. Darling	144,389	Nov. 11, 1873	192	66	4	506
Truck, Railway-car	G. Dixon	141,859	Aug. 19, 1873	416	{ 135 136 }	{ 4 4 }	{ 186 186 }
Truck, Railway-car	P. G. Gardiner	134,743	Jan. 14, 1873	236	76	3	39
Truck, Railway-car	M. H. Kollock	136,248	Feb. 25, 1873	791	{ 256 257 }	{ 3 3 }	{ 227 227 }
Truck, Railway-car	W. Youmans	135,614	Feb. 4, 1873	212	66	3	144
Truck, Railway-car safety	B. P. Lamason	135,716	Feb. 11, 1873	308	98	3	164
Truck, Safety-attachment for car	G. C. Offen	145,122	Dec. 2, 1873	77	24	4	591
Truck, Sewer-cleaning	W. S. McHarg and A. B. Hill	140,059	June 17, 1873	568	179	3	678
Trucks, Supplementary wheel for car	S. Spelman	138,949	May 13, 1873	431	135	3	543
Trunk	M. H. Bliss	138,000	Apr. 22, 1873	669	212	3	445
Trunk	G. B. Jenkinson	139,158	May 20, 1873	637	199	3	572
Trunk	H. L. Lowman	145,435	Dec. 9, 1873	355	118	4	626
Trunk and hat-box, Hand	Q. A. Scott	140,548	July 1, 1873	175	60	4	22
Trunk and strap fastener	J. Fairman	139,460	June 3, 1873	16	5	3	610
Trunk and wardrobe combined	J. A. Payne	139,420	May 27, 1873	881	283	3	600
Trunk-catch	H. C. Faber	139,306	May 27, 1873	782	248	3	592
Trunk, Extension	G. Engelsman	144,022	Oct. 28, 1873	604	200	4	458
Trunk-fastener	J. Arnold	140,338	July 1, 1873	2	1	4	8
Trunk-lid support	A. V. Romadka	141,591	Aug. 5, 1873	154	50	4	148
Trunk-lid supporter	J. Stott	139,435	May 27, 1873	893	288	3	601
Trunk-lock	T. L. Rivers	140,308	June 24, 1873	801	254	3	705
Trunk-lock or catch	A. V. Romadka	145,817	Dec. 23, 1873	706	232	4	679
Trunk, &c., Strap-fastening for	W. Grinstead	142,565	Sept. 9, 1873	227	74	4	272
Truss	C. H. Eggleston	135,638	Feb. 11, 1873	240	75	3	158
Truss	G. W. Gregory	138,640	May 6, 1873	152	49	3	510
Truss	J. F. Groves	142,337	Sept. 2, 1873	14	5	4	243
Truss	E. W. Higbee	141,220	July 29, 1873	826	270	4	111
Truss	D. Pomeroy	137,380	Apr. 1, 1873	96	31	3	364
Truss	L. and W. Pomeroy	139,917	June 17, 1873	451	140	3	668
Truss	A. T. C. Schoevers	140,168	June 24, 1873	684	215	3	695
Truss	J. A. Sherman	139,926	June 17, 1873	458	143	3	669
Truss, Brace	H. H. Roedel	145,014	Nov. 25, 1873	734	248	4	572
Truss-pad	N. Jones	136,735	Mar. 11, 1873	347	115	3	282
Truss, Pad for pile	J. L. Rowe	144,145	Oct. 28, 1873	704	234	4	466
Truss-spring	J. W. Riggs	136,387	Mar. 4, 1873	31	12	3	248
Tub:							
<i>See</i> Bath-tub.							
Butter-tub.							
Garbage-tub.							
Wash-tub.							
Tube:							
<i>See</i> Metal-tube.							
Metallic-tube.							
Paper-tube.							
Smoking-tube.							
Soda-water draft-tube.							
Speaking-tube.							
Taper-tube.							
Well-tube.							
Tube-cutter	E. Manuel	135,484	Feb. 4, 1873	84	26	3	134
Tube, Die for forming	J. Kintz	136,654	Mar. 11, 1873	280	94	3	277
Tube-expander	C. W. Deane	139,374	May 27, 1873	830	266	3	596
Tube-socket bending-machine	W. L. Newsham	137,792	Apr. 15, 1873	477	149	3	420
Tubes, &c., Machine for chucking and revolving	J. B. Root	141,593	Aug. 5, 1873	156	50	4	148
Tubing, Machine for bending	W. T. Farre	144,449	Nov. 11, 1873	240	81	4	509
Tuck-creaser	S. P. Babcock	134,966	Jan. 21, 1873	441	141	3	71
Tuck-creaser	W. Carpenter	135,078	Jan. 21, 1873	540	175	3	79
Tuck-marker	F. L. Tileston	141,095	July 22, 1873	693	233	4	93
Tug-fastening	J. Turley	135,299	Jan. 28, 1873	752	242	3	108
Tug-strap	M. Cadwell	134,975	Jan. 21, 1873	450	144	3	72
Tuning-key, Piano	A. H. Affleck	140,450	July 1, 1873	88	31	4	15
Tunnel and sewer, Construction of	G. Knoll	144,112	Oct. 28, 1873	678	224	4	464
Tunnel, &c., Metallic arch for	J. Groves	140,498	July 1, 1873	132	45	4	19
Turbine-wheel	D. B. Flint	138,239	Apr. 29, 1873	903	285	3	472
Turbine-wheel, Metallic case for	A. Myers	137,471	Apr. 1, 1873	173	55	3	371

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Turn-table.....	A. P. Boller.....	137, 887	Apr. 15, 1873	555	174	3	426
Turn-table.....	W. H. Burch.....	139, 941	June 17, 1873	469	147	3	669
Turn-table.....	J. Enright.....	135, 101	Jan. 21, 1873	556	181	3	80
Turn-table.....	C. Macdonald and C. O. H. Fritzsche.	139, 512	June 3, 1873	59	19, 20	3	613
Turn-table.....	W. Wharton, jr.....	135, 304	Jan. 28, 1873	755	244	3	108
Turning-tool.....	J. W. Ellis.....	143, 893	Oct. 21, 1873	468	157	4	436
Turpentine from sawdust, Production of.....	S. L. Cole.....	145, 151	Dec. 2, 1873	104	.....	4	594
Turpentine-tool.....	J. G. Cobb.....	139, 369	May 27, 1873	826	265	3	596
Tuyere.....	G. Harsch.....	138, 248	Apr. 29, 1873	915	289	3	473
Tuyere for Bessemer-converter, Apparatus for making.....	A. I. Haws and J. A. Vaughan.....	134, 885	Jan. 14, 1873	360	115	3	49
Tuyere, Manufacture of Bessemer-steel converter.....	J. E. Atwood.....	144, 726	Nov. 18, 1873	481	.....	4	540
Tuyeres, Compound for.....	J. E. Atwood.....	138, 781	May 13, 1873	291	.....	3	531
Twine-cutter.....	F. J. Seymour.....	139, 427	May 27, 1873	888	286	3	600
Twine-holder.....	D. Webber.....	143, 268	Sept. 30, 1873	830	285	4	358
Twist-drills, Machine for milling.....	S. W. Card.....	141, 760	Aug. 12, 1873	319	104	4	169
Twisting and doubling machine, Stop-mechanism for.....	J. A. H. Carroll.....	139, 768	June 10, 1873	312	96	3	649
Twisting-machine, Stopping-mechanism for.....	A. J. Milstead.....	141, 158	July 22, 1873	752	{ 247 } 248	{ 4 } 4	97
Type.....	W. Shaw.....	140, 436	July 1, 1873	78	27	4	14
Type.....	E. R. Whitney.....	139, 640	June 3, 1873	172	57	3	623
Type-casting apparatus.....	A. E. Converse.....	136, 815	Mar. 18, 1873	428	142	3	298
Type-casting machine.....	J. M. Conner.....	144, 066	Oct. 28, 1873	641	211	4	461
Type-casting machine.....	J. A. T. Overend.....	136, 091	Feb. 18, 1873	643	211	3	203
Type-composing machine.....	C. Kastenbein.....	140, 279	June 24, 1873	777	{ 246 } 247	{ 3 } 3	703
Type-distributing machine.....	M. Gally.....	138, 241	Apr. 29, 1873	905	285	3	473
Type-distributing machine.....	C. Kastenbein.....	140, 278	June 24, 1873	775	{ 245 } 246	{ 3 } 3	703
Type for type-setting machine, Apparatus for arranging.....	D. B. Ray.....	142, 652	Sept. 9, 1873	297	97, 98	4	278
Type, Manufacture of printing.....	J. Silversmith.....	144, 571	Nov. 11, 1873	345	{ 116 } 117	{ 4 } 4	517
Type, Printing.....	D. W. Bruce.....	139, 365	May 27, 1873	824	{ 263 } 264	{ 3 } 3	595
Type-setting machine.....	W. H. Baldwin.....	136, 018	Feb. 18, 1873	581	191	3	199
Type-setting machine.....	C. T. Moore.....	137, 466	Apr. 1, 1873	168	53, 54	3	371
Type-setting machine.....	S. H. Orwig.....	138, 922	May 13, 1873	409	129	3	541
Type-writing machine.....	J. Galloway.....	144, 450	Nov. 11, 1873	241	81, 82	4	509
Type-writing machine.....	J. R. Pember.....	139, 914	June 17, 1873	447	139	3	668
U.							
Umbrella.....	J. B. Blair.....	138, 729	May 13, 1873	245	77	3	527
Umbrella.....	J. H. Dugan and G. Moncrief.....	144, 021	Oct. 28, 1873	603	200	4	458
Umbrella.....	G. G. Griswold.....	145, 733	Dec. 23, 1873	638	208	4	673
Umbrella.....	C. C. Lusby.....	141, 151	July 22, 1873	744	246	4	97
Umbrella.....	J. McAuliffe.....	141, 941	Aug. 19, 1873	492	163	4	192
Umbrella.....	H. L. Power.....	144, 865	Nov. 25, 1873	614	209	4	562
Umbrella.....	G. W. Pressey.....	145, 310	Dec. 9, 1873	250	83	4	618
Umbrella.....	L. Sawyer.....	145, 904	Dec. 23, 1873	786	257	4	685
Umbrella.....	C. B. Spencer.....	144, 876	Nov. 25, 1873	622	211	4	562
Umbrella and cane combined.....	T. R. L. Chevers.....	139, 295	May 27, 1873	772	245	3	591
Umbrella-cover.....	D. W. Odiorne.....	143, 297	Sept. 30, 1873	856	293	4	360
Umbrella-handle.....	A. Oberndorf, jr.....	137, 233	Mar. 25, 1873	802	264	3	339
Umbrella, Manufacture of runner and top-notch for.....	T. Cox and W. Holland.....	135, 321	Jan. 28, 1873	770	249	3	110
Umbrella-notches, Manufacture of.....	A. and I. Herzberg.....	140, 920	July 15, 1873	517	174	4	69
Umbrella-ribs, Machine for affixing middle-bits to.....	A. Wilson.....	143, 210	Sept. 23, 1873	774	267	4	338
Umbrella-ribs, steel strips, &c., Apparatus for tempering.....	A. Wilson.....	136, 197	Feb. 25, 1873	751	242	3	224
Umbrella-runner.....	S. Wales.....	135, 677	Feb. 11, 1873	275	87	3	161
Umbrella-runners, Machine for cutting nicks in.....	O. M. Smith.....	137, 256	Mar. 25, 1873	823	{ 270 } 271	{ 3 } 3	340
Umbrella-stretcher, Manufacture of.....	J. Shepard.....	139, 088	May 20, 1873	567	178	3	567
Umbrella-support.....	G. S. Cooper.....	138, 861	May 13, 1873	562	112	3	537
Umbrella-supporter.....	W. A. Drown, jr.....	145, 408	Dec. 9, 1873	332	111	4	624
Umbrella-tip retainer.....	C. C. Lusby and W. W. Winter.....	139, 405	May 27, 1873	869	278	3	599
Umbrella, Walking-cane.....	E. Wright.....	138, 726	May 6, 1873	232	72	3	516
Union coupling.....	W. B. Snow.....	139, 203	May 20, 1873	676	212	3	576
Universal coupling.....	H. S. Leland.....	138, 031	Apr. 22, 1873	701	222	3	448
Universal joiner.....	J. H. Raynard, B. W. and W. P. Hatch.	138, 284	Apr. 29, 1873	949	299	3	476
Universal joint.....	J. Troxel.....	137, 578	Apr. 8, 1873	280	86	3	391
Universal joint-coupling.....	H. B. Whitehead.....	135, 054	Jan. 21, 1873	524	169	3	77
Urinal.....	J. C. Garnsey.....	145, 344	Dec. 9, 1873	278	93	4	620
Urinal for medical purposes, Bed.....	J. R. Knight and J. P. Coburn.....	137, 214	Mar. 25, 1873	787	260	3	337
Uterine supporter.....	A. C. Byam.....	144, 615	Oct. 14, 1873	202	68	4	406
Uterine supporter.....	H. N. Caner.....	137, 531	Apr. 8, 1873	238	73	3	388
Uterine supporter.....	G. Dirksen.....	136, 046	Feb. 18, 1873	603	198	3	201
V.							
Vacuum-pan.....	A. P. Brown.....	138, 375	Apr. 29, 1873	1, 028	324	3	482
Vacuum-pan for manufacturing sugar, &c.....	J. B. Root.....	144, 358	Nov. 4, 1873	156	51	4	491
Valises, &c., Device for connecting frames of.....	C. Votti.....	144, 878	Nov. 25, 1873	623	211	4	562
Valve.....	G. R. Crane.....	145, 789	Dec. 23, 1873	685	224	4	677
Valve.....	B. Fitts.....	146, 057	Dec. 30, 1873	942	303	4	708
Valve.....	A. Marriott.....	145, 996	Nov. 25, 1873	719	243	4	571
Valve.....	C. F. Murdock.....	144, 692	Nov. 18, 1873	454	154	4	538
Valve.....	J. A. Nichols.....	145, 964	Dec. 30, 1873	861	279	4	701
Valve-actuating mechanism for engines.....	F. Chase.....	144, 831	Nov. 25, 1873	581	{ 198 } 199	{ 4 } 4	559
Valve, Alarm safety.....	F. Steele.....	143, 858	Oct. 21, 1873	442	147	4	434
Valve and cut-off, Rotary.....	W. S. Bartle.....	141, 982	Aug. 19, 1873	523	173	4	195

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Valve and cut-off, Rotary	J. W. Strange	139,033	May 20, 1873	513	162	3	563
Valve and trap, Combined globe	H. J. McMahon	136,746	Mar. 11, 1873	357	118	3	283
Valve and variable cut-off, Rotary	R. T. P. Allen	137,163	Mar. 25, 1873	735	244	3	334
Valve, Automatic regulating	G. L. Kitson	139,163	May 20, 1873	641	200	3	573
Valve, Automatic regulating	G. L. Kitson	142,027	Aug. 19, 1873	556	187	4	198
Valve, Balanced	N. H. Bundy	137,654	Apr. 8, 1873	341	105	3	396
Valve, Balanced	F. P. Cady	138,992	May 20, 1873	479	152	3	560
Valve, Balanced	H. Fitzsimmons	136,985	Mar. 18, 1873	568	189	3	309
Valve, Balanced	A. N. Hadley	138,397	Apr. 29, 1873	1,045	329	3	483
Valve, Balanced	J. H. Stombs	143,193	Sept. 23, 1873	759	262	4	336
Valve, Balanced	C. P. Welch and R. J. Orr	145,261	Dec. 2, 1873	200	69	4	601
Valve, Balanced slide	T. Beesley	134,838	Jan. 14, 1873	320	102	3	46
Valve, Balanced slide	J. Evered	144,268	Nov. 4, 1873	84	27	4	485
Valve, Balanced slide	A. O. Frick	138,325	Apr. 29, 1873	989	311	3	479
Valve, Balanced slide	O. H. Gronberg	144,090	Oct. 28, 1873	661	218	4	462
Valve, Balanced slide	C. H. Hutchinson	144,458	Nov. 11, 1873	248	84	4	510
Valve, Balanced slide	S. Reid	141,728	Aug. 12, 1873	290	95	4	166
Valve, Ball	W. Mendham	143,294	Sept. 30, 1873	854	292	4	360
Valve, Cam for operating steam-engine	E. Sprague	134,944	Jan. 14, 1873	411	132	3	53
Valve-case, Fastening for safety	G. B. Sisson	140,223	June 24, 1873	729	229	3	699
Valve, Check	J. C. Hoadley	134,548	Jan. 7, 1873	41	13	3	10
Valve, Check	J. H. Naylor	141,454	Aug. 5, 1873	39	13	4	138
Valve, cock, &c., Stop	H. C. Montgomery	136,851	Mar. 18, 1873	457	151	3	300
Valve, Combined stop and check	A. A. Dame	139,878	June 17, 1873	415	129	3	665
Valve, Combined stop and check	O. E. McMurray	135,352	Jan. 28, 1873	801	259	3	112
Valve, Compensating spring-balance for safety	V. F. Lassoo	142,481	Sept. 2, 1873	142	47	4	253
Valve-device for fluid-brake	G. Westinghouse, jr.	141,685	Aug. 12, 1873	257	83	4	164
Valve-device for steam and air brake	G. Westinghouse, jr.	138,827	May 13, 1873	330	102	3	535
Valve, Duplex safety	T. Harang	135,220	Jan. 28, 1873	682	220	3	103
Valve for air-brake cylinder	N. Thomas	137,037	Mar. 18, 1873	614	203	3	313
Valve for artesian wells, &c.	J. Fleming	141,708	Aug. 12, 1873	274	89	4	165
Valve for bored or driven wells, Adjustable	M. T. and M. C. Chapman	136,412	Mar. 4, 1873	52	18	3	249
Valve for direct-acting engines	H. A. Jamieson	144,545	Nov. 11, 1873	324	109	4	516
Valve for fire-engines, Circulating	C. A. Hague	140,194	June 24, 1873	707	222	3	697
Valve for fire-engines, Relief	A. Mayer	143,920	Oct. 21, 1873	489	165	4	438
Valve for hydraulic cranes, Balanced	J. A. Vaughn	143,266	Sept. 30, 1873	829	284	4	358
Valve for locomotive and other engines, Throttle	H. Watkeys	139,694	June 10, 1873	242	75, 76	3	644
Valve for locomotives, Relief	G. W. Richardson	136,618	Mar. 11, 1873	250	84	3	274
Valve for stand-pipes, Balanced	J. N. Poage	141,815	Aug. 12, 1873	371	122	4	173
Valve for steam and vacuum pumps	A. J. Simmons	141,599	Aug. 5, 1873	163	52	4	148
Valve for steam-boilers, Safety	H. W. Shepard	145,534	Dec. 16, 1873	459	150	4	646
Valve for steam-engines	A. Carr	143,807	Oct. 21, 1873	398	132	4	430
Valve for steam-engines	H. I. Hoyt	142,788	Sept. 16, 1873	425	143	4	298
Valve for steam-engines, Balanced	W. Glen	141,218	July 29, 1873	824	269	4	111
Valve for steam-engines, Balanced	A. Henry	138,804	May 13, 1873	310	96	3	533
Valve for steam-engines, Balanced	N. P. Stevens	145,764	Dec. 23, 1873	666	217	4	675
Valve for steam-engines, Balanced-slide	J. F. Wallace	143,043	Sept. 23, 1873	643	220	4	327
Valve for steam-engines, Piston	A. Baumann	139,357	May 27, 1873	817	261	3	595
Valve for steam-engines, Rotary	G. Westinghouse, jr.	138,828	May 13, 1873	332	102	3	535
Valve for steam-engines, Slide	N. Johnson	139,793	June 10, 1873	332	103	3	651
Valve for steam-engines, Slide	W. Love	144,463	Nov. 11, 1873	253	85	4	510
Valve for steam fire-engines, Relief	W. Jeffers	144,765	Nov. 18, 1873	515	175	4	543
Valve for steam-pipes	J. W. Hodges	146,073	Dec. 30, 1873	953	308	4	709
Valve for the waste-pipes of sinks	J. Chilcott	143,883	Oct. 21, 1873	462	155	4	436
Valve for water and gas mains, &c., Stop	C. W. Isbell	142,700	Sept. 9, 1873	337	113	4	281
Valve for water-pipes	D. G. Phipps	144,356	Nov. 4, 1873	154	51	4	491
Valve, Gas-regulator	J. C. Sarsfield	136,007	Feb. 18, 1873	570	188	3	198
Valve-gear and connection for steam and other engines	R. M. Fryer	135,795	Feb. 11, 1873	378	122	3	169
Valve-gear, Engine	R. M. Fryer	135,796	Feb. 11, 1873	379	122	3	169
Valve-gear for direct-acting steam-engine	J. Tesseyman and E. I. Howard	139,439	May 27, 1873	896	289	3	601
Valve-gear, Steam-engine	J. W. Hackworth	135,036	Jan. 21, 1873	508	164	3	76
Valve-gear, Steam-engine	C. Rogers	140,309	June 24, 1873	802	254	3	705
Valve-gear, Steam-engine	J. Wheelock	144,174	Oct. 28, 1873	730	244	4	468
Valve, Globe	A. P. Brown	140,006	June 17, 1873	517	164	3	674
Valve, Governor	H. B. Weaver	143,045	Sept. 23, 1873	645	221	4	327
Valve-guide	R. J. Gould	142,458	Sept. 2, 1873	121	39	4	252
Valve, Hydraulic	T. Critchlow	136,489	Mar. 4, 1873	119	39	3	235
Valve, Liquid-sealed	L. Winterbauer	139,347	May 27, 1873	810	259	3	594
Valve-lubricator	J. Cochrane	136,136	Feb. 25, 1873	704	227	3	220
Valve-mechanism, Slide	E. E. Gilbert	143,819	Oct. 21, 1873	406	135	4	431
Valve-movement for reciprocating-engines	H. C. Sergeant	143,261	Sept. 30, 1873	825	283	4	358
Valves of steam-engines, Device for operating	W. J. Stevens	142,292	Aug. 26, 1873	811	268	4	228
Valve or cut-off for cupola and other furnaces	W. H. Ward	139,693	June 10, 1873	240	75	3	644
Valve, Pipe-organ	W. Schulke	145,453	Dec. 9, 1873	367	122	4	627
Valve, Piston	G. H. Gibbs	139,463	June 3, 1873	18	6	3	610
Valve, Pressure-regulating	W. Craig and H. L. Brevort	142,773	Sept. 16, 1873	412	139	4	297
Valve, Pump	W. Barnes	141,309	July 29, 1873	905	297	4	118
Valve, Pump	R. J. Gould and M. E. Campfield	144,844	Nov. 25, 1873	594	202	4	560
Valve, Pump	W. Painter	141,587	Aug. 5, 1873	150	48	4	147
Valve, Register	J. W. Starr	141,521	Aug. 5, 1873	97	30	4	143
Valve, Safety	W. Churchill	140,115	June 24, 1873	638	201	3	692
Valve, Safety	H. Davies	135,698	Feb. 11, 1873	294	93	3	163
Valve, Safety	E. C. Fernald	137,540	Apr. 8, 1873	245	75	3	388
Valve, Safety	J. Hoffman	143,825	Oct. 21, 1873	410	137	4	432
Valve, Safety	J. Jordan and A. Paul	145,876	Dec. 23, 1873	758	247	3	683
Valve, Safety	G. J. Rains	136,938	Mar. 18, 1873	529	175	3	306
Valve, Safety	G. Swenson	139,209	May 20, 1873	680	214	3	576
Valve, Screw	P. Corrigan	141,697	Aug. 12, 1873	266	86	4	164
Valve, Slide	J. L. Brown	138,376	Apr. 29, 1873	1,029	324	3	482
Valve, Slide	A. S. Nelson	144,282	Nov. 4, 1873	93	31	4	485
Valve, Slide	W. Stephens	144,295	Nov. 4, 1873	102	34	4	486
Valve, Steam	H. P. Jones	142,702	Sept. 9, 1873	338	113	4	281
Valve, Steam and other	E. F. Spaulding	139,339	May 27, 1873	803	256	3	594
Valve, Steam-engine governor	E. Ware	139,096	May 20, 1873	573	180	3	567

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Valve, Steam-engine piston	G. M. Weinman	137, 986	Apr. 15, 1873	639	{ 201 202	3	433
Valve, Steam-engine reversing	P. W. Mellen	137, 229	Mar. 25, 1873	799	263	3	338
Valve, Steam fire-engine automatic-relief	A. Mayer	135, 437	Feb. 4, 1873	41	12	3	131
Valve-stem, Steam-tight joint of	G. R. Babbitt	135, 876	Feb. 18, 1873	465	149	3	190
Valve, Stop	G. W. Eddy	140, 407	July 1, 1873	57	20	4	13
Valve, Stop	G. W. Eddy	141, 041	July 22, 1873	644	217	4	89
Valve, Water-supply	P. Harvey	140, 918	July 15, 1873	515	173	4	69
Valve, Water-tank outlet	J. Armstrong and D. Cheney	141, 747	Aug. 12, 1873	306	100	4	168
Valve, Wooden-pump clack	A. Breed	137, 126	Mar. 25, 1873	705	234	3	331
Vapor-bath	J. Büler	142, 767	Sept. 16, 1873	406	137	4	297
Vapor-engine	J. F. Haskins	137, 200	Mar. 25, 1873	775	256	3	336
Vapor-engine	J. F. Haskins	136, 241	Feb. 25, 1873	785	254	3	227
Vapor-engine	W. Wells	145, 466	Dec. 9, 1873	379	125	4	628
Vapor-generator	W. Wells	139, 445	May 27, 1873	900	290	3	601
Vapor-generator	W. Wells	144, 581	Nov. 11, 1873	353	119	4	518
Varnish or bronze coating for articles of plaster, iron, wood, &c.	C. Rotter	139, 333	May 27, 1873	799	.....	3	593
Varnish or polish for wood, metals, &c.	J. F. Chevalier	144, 955	Nov. 25, 1873	682	.....	4	568
Varnishes, Refining	F. Kersting	144, 910	Nov. 25, 1873	645	.....	4	564
Vat: <i>See</i> Cheese-vat. Indigo-blue vat. Tan-vat.							
Vault-cover	J. C. French	139, 241	May 27, 1873	722	228	3	587
Vault-cover	T. Hyatt	136, 519	Mar. 4, 1873	150	48	3	257
Vault-cover	T. Sharts	138, 204	Apr. 22, 1873	851	269	3	460
Vault-cover	W. R. Williams	139, 938	June 17, 1873	466	146	3	669
Vault-cover, Elevating	T. Hyatt	145, 207	Dec. 2, 1873	151	51	4	597
Vault-cover, Illuminating	T. Hyatt	140, 709	July 8, 1873	326	111	4	46
Vault-cover, Illuminating	T. Hyatt	145, 187	Dec. 2, 1873	138	45	4	596
Vault-cover, Illuminating	T. Hyatt	145, 188	Dec. 2, 1873	139	46	4	596
Vault-cover, Illuminating	T. Hyatt	145, 189	Dec. 2, 1873	139	46	4	596
Vault-cover, Illuminating	T. Hyatt	145, 190	Dec. 2, 1873	140	46	4	596
Vault-cover, Illuminating	T. Hyatt	145, 191	Dec. 2, 1873	141	46	4	596
Vault-cover, Illuminating	T. Hyatt	145, 192	Dec. 2, 1873	141	47	4	596
Vault-cover, Illuminating	T. Hyatt	145, 193	Dec. 2, 1873	142	47	4	597
Vault-cover, Illuminating	T. Hyatt	145, 194	Dec. 2, 1873	143	47	4	597
Vault-cover, Illuminating	T. Hyatt	145, 195	Dec. 2, 1873	143	47	4	597
Vault-cover, Illuminating	T. Hyatt	145, 196	Dec. 2, 1873	144	48	4	597
Vault-cover, Illuminating	T. Hyatt	145, 197	Dec. 2, 1873	145	48	4	597
Vault-cover, Illuminating	T. Hyatt	145, 198	Dec. 2, 1873	145	48	4	597
Vault-cover, Illuminating	T. Hyatt	145, 199	Dec. 2, 1873	146	48, 49	4	597
Vault-cover, Illuminating	T. Hyatt	145, 200	Dec. 2, 1873	147	49	4	597
Vault-cover, Illuminating	T. Hyatt	145, 201	Dec. 2, 1873	147	49, 50	4	597
Vault-cover, Illuminating	T. Hyatt	145, 202	Dec. 2, 1873	148	50	4	597
Vault-cover, Illuminating	J. K. Ingalls	146, 074	Dec. 30, 1873	953	308	4	709
Vault-cover, Non-condensing illuminating	T. Hyatt	145, 203	Dec. 2, 1873	148	50	4	597
Vault-cover, Non-condensing illuminating	T. Hyatt	145, 204	Dec. 2, 1873	149	50	4	597
Vault-cover, Non-condensing illuminating	T. Hyatt	145, 205	Dec. 2, 1873	149	51	4	597
Vault-cover, Non-condensing illuminating	T. Hyatt	145, 206	Dec. 2, 1873	150	51	4	597
Vault, Fire-proof	G. W. Pittman	139, 916	June 17, 1873	450	140	3	668
Vault, Fire-proof	J. W. Warner	134, 575	Jan. 7, 1873	70	22	3	12
Vault-light	T. Hyatt	135, 120	Jan. 21, 1873	571	186	3	81
Vault-light	J. Wood	138, 724	May 6, 1873	231	72	3	516
Vault, Metallic	A. L. Stimson	143, 309	Sept. 30, 1873	865	{ 296 297	4	361
Vault-plate, Flexible illuminating	T. Hyatt	145, 208	Dec. 2, 1873	152	52	4	597
Vault, Safe	M. McCall and R. O. Wood	139, 907	June 17, 1873	442	138	3	667
Vegetable-cutter	J. Kram	144, 773	Nov. 18, 1873	522	177	4	544
Vegetable-cutter	G. W. Parker	142, 580	Sept. 9, 1873	239	78	4	273
Vegetable-cutter	J. R. Wharry	144, 645	Nov. 18, 1873	419	140	4	535
Vegetable-cutter, Rotary	N. Schlessor	140, 221	June 24, 1873	727	229	3	699
Vehicle	G. Coffee and W. M. Bernard	137, 657	Apr. 8, 1873	345	107	3	396
Vehicle	C. Gormann and J. B. Thiel	145, 413	Dec. 9, 1873	336	113	4	625
Vehicle	M. V. Nichols	144, 473	Nov. 11, 1873	260	88	4	511
Vehicle	B. Parmiter and W. Bradley	145, 965	Dec. 30, 1873	862	280	4	701
Vehicle	E. D. Weller	141, 905	Aug. 19, 1873	465	152	4	190
Vehicle, Adjustable stay-spring for	A. A. Horne	142, 105	Aug. 26, 1873	659	216	4	215
Vehicle-axle	T. F. Coleman	143, 435	Oct. 7, 1873	34	12	4	383
Vehicle-axle	H. Frederick	145, 165	Dec. 2, 1873	117	38	4	594
Vehicle-axle	L. Martin	144, 278	Nov. 4, 1873	91	30	4	485
Vehicle-axle and axle-box	F. Hunsinger	138, 890	May 13, 1873	386	121	3	539
Vehicle-axle and sleeve	W. H. Sparks	141, 018	July 22, 1873	627	211	4	87
Vehicle, Axle and thimble-skein for	A. Kessberger	142, 344	Sept. 2, 1873	19	7	4	244
Vehicle-axle, Sand-band for	J. B. Winchell and H. W. Rugg	144, 244	Nov. 4, 1873	67	21	4	483
Vehicle bolster-spring	H. Buck	136, 360	Mar. 4, 1873	6	2	3	246
Vehicle-coupling	C. H. Cratar	143, 404	Oct. 7, 1873	6	2	4	381
Vehicle-door, Mode of opening and closing	S. Smith	141, 733	Aug. 12, 1873	293	96	4	167
Vehicle, Holdback for	H. M. Burdick and M. R. Flanders	146, 042	Dec. 30, 1873	924	299	4	707
Vehicle-hound	A. Mühleisen	140, 066	June 17, 1873	577	182	3	679
Vehicle-pole	A. Schmidt	141, 957	Aug. 19, 1873	504	166	4	193
Vehicle recording-apparatus	A. Guebhard and A. P. Tronchon	137, 676	Apr. 8, 1873	363	112	3	398
Vehicle running-gear	I. O. Meddows	136, 331	Feb. 25, 1873	866	279	3	233
Vehicle running-gear	L. R. Rosebrook	141, 463	Aug. 5, 1873	49	15	4	139
Vehicle-seat	A. B. Sheaffer	138, 537	May 6, 1873	62	21	3	502
Vehicle-seat	U. C. Snyder	144, 709	Nov. 18, 1873	467	158	4	539
Vehicle shifting top	M. B. Keller	144, 107	Oct. 28, 1873	675	223	4	463
Vehicle, Shifting top for	H. K. Porter	144, 790	Nov. 18, 1873	535	182	4	545
Vehicle side-bar	F. I. Flowers	142, 011	Aug. 19, 1873	550	182	4	197
Vehicle-spring	H. Bowles	142, 325	Sept. 2, 1873	4	2	4	242
Vehicle-spring	E. Cliff	134, 853	Jan. 14, 1873	332	106	3	47
Vehicle-spring	F. K. John	134, 673	Jan. 7, 1873	165	55	3	20
Vehicle-spring	G. W. Lewis	143, 085	Sept. 23, 1873	676	232	4	329
Vehicle-spring	J. Mayer	139, 801	June 10, 1873	340	105	3	632

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Vehicle-spring.....	J. M. Miller.....	134,916	Jan. 14, 1873	388	123	3	51
Vehicle-spring.....	P. Penn.....	139,809	June 10, 1873	347	107	3	652
Vehicle-spring.....	C. W. Saladee.....	146,100	Dec. 30, 1873	978	316	4	711
Vehicle-spring.....	T. R. Timby.....	136,284	Feb. 25, 1873	827	267	3	230
Vehicle-spring brace.....	C. V. N. Suydam.....	145,916	Dec. 23, 1873	796	261	4	685
Vehicle-spring coupling.....	H. P. Dolson.....	142,901	Sept. 16, 1873	514	175	4	306
Vehicles, Spring for the seats of.....	C. Duecker.....	145,994	Dec. 30, 1873	884	287	4	703
Vehicle-wheel.....	C. Anderegg.....	141,099	July 22, 1873	697	234	4	93
Vehicle-wheel.....	D. Argerbriht.....	135,060	Jan. 21, 1873	529	171	3	78
Vehicle-wheel.....	A. L. Blackman.....	135,623	Feb. 11, 1873	227	71	3	157
Vehicle-wheel.....	D. Brown.....	145,783	Dec. 23, 1873	680	222	4	677
Vehicle-wheel.....	J. Q. Bryer.....	141,111	July 22, 1873	708	236	4	94
Vehicle-wheel.....	A. Bucholz.....	145,393	Dec. 9, 1873	317	107	4	623
Vehicle wheel.....	J. P. Chandler and W. V. Tainter.....	143,328	Sept. 30, 1873	882	301	4	362
Vehicle wheel.....	G. J. Cross.....	139,661	June 10, 1873	203	66	3	641
Vehicle-wheel.....	D. Dimmick.....	143,813	Oct. 21, 1873	402	134	4	431
Vehicle-wheel.....	J. L. Dom.....	136,425	Mar. 4, 1873	60	21	3	250
Vehicle-wheel.....	J. F. and W. Downing.....	135,701	Feb. 11, 1873	296	94	3	163
Vehicle-wheel.....	D. B. French.....	145,291	Dec. 9, 1873	231	78	4	616
Vehicle-wheel.....	J. C. Garretson.....	143,233	Sept. 30, 1873	800	276	4	356
Vehicle-wheel.....	J. H. Glover.....	143,820	Oct. 21, 1873	407	136	4	431
Vehicle-wheel.....	H. A. Gore.....	142,098	Aug. 26, 1873	652	214	4	215
Vehicle-wheel.....	G. Hageman.....	139,144	May 20, 1873	621	194	3	571
Vehicle-wheel.....	P. C. Hairston.....	143,282	Sept. 30, 1873	841	289	4	359
Vehicle-wheel.....	S. B. Hindman.....	136,376	Mar. 4, 1873	8	8	3	247
Vehicle-wheel.....	P. C. House.....	141,715	Aug. 12, 1873	280	91	4	166
Vehicle-wheel.....	J. C. Hurley.....	135,119	Jan. 21, 1873	570	186	3	81
Vehicle-wheel.....	P. Jones.....	137,083	Mar. 18, 1873	670	222	3	328
Vehicle-wheel.....	R. R. Jones.....	143,077	Sept. 23, 1873	669	230	4	329
Vehicle-wheel.....	R. R. Jones.....	143,078	Sept. 23, 1873	670	230	4	329
Vehicle-wheel.....	H. Kellogg.....	134,894	Jan. 14, 1873	369	117	3	50
Vehicle-wheel.....	H. B. Leckenby.....	135,434	Feb. 4, 1873	39	12	3	130
Vehicle-wheel.....	M. Linck.....	145,219	Dec. 2, 1873	162	56	4	598
Vehicle-wheel.....	O. Look.....	141,652	Aug. 12, 1873	228	72	4	161
Vehicle-wheel.....	M. McNalley.....	136,928	Mar. 18, 1873	520	172	3	305
Vehicle-wheel.....	S. J. Miller and L. Wright.....	137,017	Mar. 18, 1873	598	198	3	312
Vehicle-wheel.....	J. O'Connor.....	143,776	Oct. 21, 1873	369	122	4	428
Vehicle-wheel.....	N. Palmer.....	135,244	Jan. 28, 1873	709	227	3	105
Vehicle-wheel.....	L. G. Peel.....	143,378	Sept. 30, 1873	931	315	4	366
Vehicle-wheel.....	H. Pitcher.....	136,669	Mar. 11, 1873	295	98	3	278
Vehicle-wheel.....	T. W. Porter.....	143,029	Sept. 23, 1873	631	215	4	326
Vehicle-wheel.....	J. J. Ralya.....	136,761	Mar. 11, 1873	368	122	3	284
Vehicle-wheel.....	G. W. Smith.....	140,552	July 1, 1873	180	61	4	23
Vehicle-wheel.....	O. D. Spalding.....	137,629	Apr. 8, 1873	319	99	3	394
Vehicle-wheel.....	C. W. Spayd.....	142,876	Sept. 16, 1873	494	168	4	304
Vehicle-wheel.....	S. T. F. Sterick.....	139,830	June 10, 1873	364	113	3	654
Vehicle-wheel.....	S. Vreeland.....	136,567	Mar. 4, 1873	193	64	3	261
Vehicle-wheel.....	M. B. White.....	143,481	Oct. 7, 1873	68	24	4	386
Vehicle-wheel.....	H. Williams.....	141,411	July 29, 1873	1,009	328	4	125
Vehicle-wheel.....	J. B. Withey.....	142,831	Sept. 16, 1873	458	155	4	301
Vehicle-wheel.....	J. Woodburn.....	139,697	June 10, 1873	244	77	3	644
Vehicle-wheel.....	J. F. Wright and B. B. Jones.....	138,220	Apr. 22, 1873	865	274	3	461
Vehicle-wheel skein and box.....	N. L. Holmes.....	142,233	Aug. 26, 1873	766	251	4	224
Vehicle-wheels, Thimble-skein for.....	J. Lahman.....	141,568	Aug. 5, 1873	137	44	4	146
Velocipede.....	G. Dismer.....	138,486	May 6, 1873	17	6	3	499
Velocipede.....	W. Gaffey.....	137,431	Apr. 1, 1873	136	44	3	368
Velocipede.....	J. E. Hoffmire.....	134,989	Jan. 21, 1873	462	148	3	72
Velocipede.....	J. F. McClure.....	144,551	Nov. 11, 1873	329	111	4	516
Velocipede.....	L. T. McGilvray.....	140,290	June 24, 1873	786	249	3	704
Velvet, &c., Apparatus for renovating.....	M. J. and J. T. Dewey.....	142,088	Aug. 26, 1873	643	211	4	214
Veneer-cutter.....	J. N. Seib.....	137,489	Apr. 1, 1873	193	59	3	373
Veneer-cutter.....	J. N. Seib.....	141,596	Aug. 5, 1873	159	51	4	148
Veneer-cutting machine.....	J. W. Leslie and G. R. Smith.....	138,901	May 13, 1873	394	124	3	540
Veneer-cutting machine.....	J. N. Seib.....	145,246	Dec. 2, 1873	185	64	4	600
Veneer-cutting machine.....	J. A. Squires.....	142,591	Sept. 9, 1873	249	82	4	274
Veneer-cutting machine.....	W. H. Williams.....	144,938	Nov. 25, 1873	668	227	4	567
Veneer-keg.....	G. W. Swan.....	141,963	Aug. 19, 1873	509	168	4	193
Veneers, Method of perfecting.....	A. H. Allen.....	138,357	Apr. 29, 1873	1,014	319	3	481
Vent.....	O. S. Camp.....	135,320	Jan. 28, 1873	769	249	3	110
Vent-gimlet.....	H. S. Rummer.....	141,465	Aug. 5, 1873	51	16	4	139
Ventilator: See Building-ventilator. Car-ventilator. Sash-ventilator. Tent-ventilator. Window-ventilator.							
Ventilator.....	G. R. Barker.....	135,507	Feb. 4, 1873	103	33	3	135
Ventilator.....	J. Ballou.....	142,140	Aug. 26, 1873	688	226	4	217
Vertical-engine frame.....	G. B. Sisson.....	141,467	Aug. 5, 1873	52	16	4	139
Vessel, Apparatus for relieving grounded.....	W. R. Rightor.....	142,732	Sept. 9, 1873	365	123	4	283
Vessel, Armor-clad.....	L. Goddu.....	136,055	Feb. 18, 1873	611	201	3	201
Vessel, Camel for raising sunken.....	H. H. Siebe, W. A. Gorman, and T. Christy, jr.	141,083	July 22, 1873	682	229	4	92
Vessel, Combination of center and bilge keel for.....	S. P. Willeby.....	139,222	May 20, 1873	691	217	3	577
Vessel, Construction of.....	H. Hirsch.....	145,347	Dec. 9, 1873	280	94	4	620
Vessel, Construction of.....	W. F. Morgan.....	138,178	Apr. 22, 1873	825	262	3	458
Vessel, Construction of steam.....	T. and W. L. Winans.....	144,243	Nov. 4, 1873	66	21	4	483
Vessel, Covered.....	W. Bates.....	143,116	Sept. 23, 1873	701	240	4	331
Vessel, Device for raising sunken.....	L. W. Briggs.....	143,056	Sept. 23, 1873	655	224	4	328
Vessel for paint, oil, varnish, &c.....	R. Mansure, jr.....	140,148	June 24, 1873	667	209	3	604
Vessel, Manufacture of sheet-metal.....	J. G. L. Boettcher.....	137,886	Apr. 15, 1873	555	174	3	426
Vessel, Means for buoying and stopping holes in.....	J. W. Cooper.....	136,817	Mar. 18, 1873	430	142	3	298
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Vessels, Oscillating cabin for.....	B. Weisker.....	140,978	July 15, 1873	576	194	4	74

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Vessel, Propelling.....	J. O'Neil.....	144, 474	Nov. 11, 1873	261	88	4	511
Vessel, Raising sunken.....	R. W. Hallett.....	136, 832	Mar. 18, 1873	442	146	3	299
Vessel, Removable ceiling for.....	W. F. Morgan.....	142, 262	Aug. 26, 1873	787	260	4	226
Vessel, Sheet-metal.....	H. W. Shepard.....	135, 855	Feb. 11, 1873	431	140	3	173
Vest, Ladies' under.....	O. P. Flynt.....	143, 002	Sept. 23, 1873	607	206	4	324
Vest, Sportsman's cartridge-holding.....	J. H. Black.....	144, 594	Nov. 18, 1873	372	125	4	531
Vest-supporter.....	B. F. Martin and E. Mapes.....	141, 007	July 22, 1873	615	208	4	87
Veterinary operations, Device for holding hogs in.....	A. M. Scott and T. Wilson.....	134, 707	Jan. 7, 1873	196	63	3	22
Vinegar and ageing spirits, Apparatus for making.....	W. M. Skelton.....	140, 653	July 8, 1873	280	95	4	42
Violin.....	J. Belknap.....	143, 117	Sept. 23, 1873	701	240	4	331
Vise.....	D. S. Coe.....	140, 404	July 1, 1873	55	20	4	13
Vise.....	D. Green.....	137, 302	Apr. 1, 1873	21	6	3	359
Vise.....	T. Hall.....	140, 269	June 24, 1873	766	242	3	702
Vise.....	J. Hunt.....	142, 470	Sept. 2, 1873	134	44	4	253
Vise.....	I. Roberts.....	134, 932	Jan. 14, 1873	401	128	3	52
Vise, Adjustable bench.....	J. B. Wardwell.....	144, 934	Nov. 25, 1873	665	226	4	566
Vise, Saw-filing.....	C. S. Bonney.....	135, 883	Feb. 18, 1873	471	152	3	190
Volute spring.....	P. G. Gardiner.....	144, 201	Nov. 4, 1873	26	8	4	480
Voting-apparatus, Legislative.....	J. A. Criswell.....	142, 002	Aug. 19, 1873	542	179	4	196
Vulcanizable compounds of rubber, &c., Apparatus for mixing.....	T. J. Mayall.....	144, 998	Nov. 25, 1873	721	243	4	571
Vulcanized-rubber compound.....	W. A. Torrey.....	137, 509	Apr. 1, 1873	213	.....	3	374
Vulcanizing rubber-belt, &c.....	T. J. Mayall.....	140, 519	July 1, 1873	151	52	4	21
Vulcanizing rubber-coated articles.....	A. Albright.....	137, 872	Apr. 15, 1873	543	169	3	425
W.							
Wad-winding machine.....	A. C. Hobbs.....	137, 773	Apr. 15, 1873	462	144	3	419
Wadding, and machine for its manufacture.....	A. Chambers.....	140, 184	June 24, 1873	699	220	3	696
Waffle-baker.....	S. S. Fitch.....	143, 564	Oct. 14, 1873	157	53	4	402
Wagon.....	T. W. Porter.....	143, 030	Sept. 23, 1873	632	215	4	326
Wagon.....	F. Post.....	143, 185	Sept. 23, 1873	750	259	4	336
Wagon and sleigh, Binder for loaded.....	J. Paff.....	139, 969	June 17, 1873	489	154	3	671
Wagon, Apparatus for hoisting and dumping loaded.....	W. J. Brown.....	136, 698	Mar. 11, 1873	315	104	3	280
Wagon, Apparatus for unloading corn from.....	T. Barron.....	145, 779	Dec. 23, 1873	677	221	4	676
Wagon-axle, Machine for turning.....	G. A. Bolser.....	142, 368	Sept. 2, 1873	41	15	4	245
Wagon-axle skein-clip.....	J. M. Orput.....	144, 695	Nov. 18, 1873	457	155	4	538
Wagon-bed lifter.....	D. Rood.....	141, 669	Aug. 12, 1873	244	77	4	163
Wagon-body.....	B. Burr.....	142, 989	Sept. 23, 1873	595	{ 202 203 }	{ 4 4 }	323
Wagon-body.....	N. B. Cooper.....	135, 779	Feb. 11, 1873	359	116	3	168
Wagon-body.....	H. Lavies and H. Stiefvater.....	138, 506	May 6, 1873	31	11	3	500
Wagon-body.....	H. A. Luttgens.....	134, 996	Jan. 21, 1873	469	151	3	73
Wagon body and seat.....	P. S. Rich.....	136, 268	Feb. 25, 1873	814	263	3	229
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Wagon bolster-plate.....	T. and J. Pickard.....	138, 816	May 13, 1873	321	99	3	534
Wagon-box corner-fastening.....	J. W. Crandall.....	143, 333	Sept. 30, 1873	886	303	4	363
Wagon-box to bolster, Device for holding.....	H. L. Anderson.....	142, 978	Sept. 23, 1873	587	199	4	322
Wagon-brake.....	W. P. Buckner.....	143, 747	Oct. 21, 1873	346	115	4	426
Wagon-brake.....	B. W. Coe.....	144, 443	Nov. 11, 1873	237	80	4	509
Wagon-brake.....	J. F. Durbin.....	143, 337	Sept. 30, 1873	889	304	4	363
Wagon-brake.....	E. N. Jack.....	144, 849	Nov. 25, 1873	600	204	4	560
Wagon-brake.....	W. F. Osborn.....	142, 579	Sept. 9, 1873	238	78	4	273
Wagon-brake.....	R. Roberts.....	135, 491	Feb. 4, 1873	89	28	3	134
Wagon-brake.....	W. B. Stanley.....	137, 633	Apr. 8, 1873	322	100	3	395
Wagon-coupling.....	U. Wynn.....	135, 742	Feb. 11, 1873	328	105	3	165
Wagon, Dumping.....	J. H. Adriaans.....	138, 111	Apr. 22, 1873	768	244	3	453
Wagon, Dumping.....	B. Bodley.....	135, 195	Jan. 28, 1873	656	211	3	101
Wagon, Dumping.....	W. Fields.....	144, 608	Nov. 18, 1873	383	129	4	532
Wagon, Dumping.....	R. Greer and W. J. Thomason.....	143, 570	Oct. 14, 1873	163	54	4	402
Wagon, Dumping.....	O. Gunnuldsen.....	138, 395	Apr. 29, 1873	1, 044	329	3	483
Wagon, Dumping.....	D. E. Haines.....	138, 246	Apr. 29, 1873	914	288	3	473
Wagon, Dumping.....	J. Highfield.....	140, 703	July 8, 1873	322	109	4	46
Wagon, Dumping.....	D. D. Smith.....	142, 049	Aug. 19, 1873	594	195	4	200
Wagon end-gate.....	J. C. Baird and M. Miller.....	144, 429	Nov. 11, 1873	228	76	4	508
Wagon end-gate.....	T. A. and J. L. Brown.....	143, 960	Oct. 28, 1873	546	181	4	453
Wagon end-gate.....	J. D. Carey.....	139, 766	June 10, 1873	310	96	3	649
Wagon end-gate.....	F. Grundy.....	142, 566	Sept. 9, 1873	228	74	4	272
Wagon end-gate.....	S. F. Robertson.....	139, 974	June 17, 1873	492	155	3	671
Wagon end-gate.....	R. Smillie and C. H. Brooks.....	141, 602	Aug. 5, 1873	166	53	4	148
Wagon extension-trough.....	A. Iske.....	137, 371	Apr. 1, 1873	83	27	3	364
Wagon for hauling stone or heavy bodies.....	I. E. Truesdell.....	136, 287	Feb. 25, 1873	830	268	3	230
Wagon, Hand.....	S. D. Scott.....	142, 285	Aug. 26, 1873	806	266	4	227
Wagon-jack.....	M. Buck.....	145, 046	Dec. 2, 1873	4	1	4	586
Wagon-jack.....	A. G. Cooley.....	143, 886	Oct. 21, 1873	465	156	4	436
Wagon-jack.....	N. Crandall.....	141, 700	Aug. 12, 1873	267	87	4	165
Wagon-loader.....	J. Johnson.....	137, 138	Mar. 25, 1873	715	237	3	332
Wagon loading and unloading apparatus.....	B. Cockly.....	143, 222	Sept. 30, 1873	791	273	4	355
Wagon, Market.....	J. Tamkins, sr.....	142, 058	Aug. 19, 1873	600	197	4	200
Wagon, Road.....	C. W. Saladee.....	137, 324	Apr. 1, 1873	43	13	3	360
Wagon, Road.....	C. W. Saladee.....	137, 963	Apr. 15, 1873	620	196	3	432
Wagon running-gear.....	A. Lewis.....	139, 588	June 3, 1873	125	42	3	619
Wagon running-gear.....	I. O. Meddows.....	140, 154	June 24, 1873	672	211	3	694
Wagon running-gear.....	G. Phillips.....	143, 249	Sept. 30, 1873	814	279	4	357
Wagon-seat.....	T. J. Alexander.....	144, 492	Nov. 11, 1873	277	94	4	512
Wagon-seat.....	J. G. and J. S. Armstrong.....	136, 123	Feb. 25, 1873	689	223	3	219
Wagon-seat.....	A. J. Cogan.....	136, 814	Mar. 18, 1873	428	141	3	298
Wagon-seat.....	E. C. Cole.....	137, 419	Apr. 1, 1873	124	41	3	367
Wagon-seat.....	M. Sikes.....	143, 086	Sept. 23, 1873	676	233	4	329
Wagon-seat.....	J. W. Plattenburg.....	138, 693	May 6, 1873	200	63	3	513
Wagon-seat.....	I. Powers.....	143, 715	Oct. 14, 1873	297	97	4	412
Wagon-seat.....	J. U. Shultz.....	139, 027	May 20, 1873	509	160	3	562
Wagon-seat.....	J. Winecoff.....	138, 598	May 6, 1873	114	37	3	507

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Wagon, Self-loading.....	T. Handy.....	140,271	June 24, 1873	769	243	3	703
Wagon-spring.....	D. A. Boyle.....	143,744	Oct. 21, 1873	343	114	4	426
Wagon-spring.....	W. H. Brace.....	140,110	June 24, 1873	635	199	3	691
Wagon-spring.....	G. A. Brice.....	143,958	Oct. 28, 1873	545	181	4	453
Wagon-standard.....	J. L. Hudson.....	138,402	Apr. 29, 1873	1,050	331	3	484
Wagon-standard.....	J. H. Knisley and J. C. Ferguson..	138,807	May 13, 1873	312	97	3	533
Wagon-standard.....	C. W. Saladee.....	145,594	Dec. 16, 1873	505	166	4	650
Wagons. Trestle-platform for unloading from.....	J. K. Wilson.....	137,584	Apr. 8, 1873	284	88	3	391
Walk-edger.....	I. V. Brower and J. C. Higgins..	144,252	Nov. 4, 1873	72	23	4	484
Wall for buildings.....	T. Hyatt.....	142,474	Sept. 2, 1873	137	45	4	253
Wall, Gage for erecting plank.....	T. W. H. Moseley.....	140,943	July 15, 1873	543	182	4	72
Wall, Hose port-hole for partition.....	H. Woodman.....	136,687	Mar. 11, 1873	307	102	3	279
Wall or window washer.....	E. N. Bradley.....	137,340	Apr. 1, 1873	59	18	3	361
Wall-paper, Composition for water-proofing.....	C. Van Herwerden.....	141,525	Aug. 5, 1873	105	.....	4	143
Wall-paper, Process of preparing.....	A. W. Paull.....	140,533	July 1, 1873	163	.....	4	21
Wall-paper, Process of removing.....	C. F. Ware.....	137,396	Apr. 1, 1873	105	.....	3	365
Wall, Plaster.....	M. F. Lyons.....	138,170	Apr. 22, 1873	817	260	3	457
Wall-protector and towel-rack, Combined.....	J. F. Hummel.....	140,506	July 1, 1873	140	48	4	20
Wall, Water-proof.....	H. Mattfeld.....	134,911	Jan. 14, 1873	384	122	3	51
Walls and ceilings, Coating and ornamenting.....	C. H. Crittenden.....	141,330	July 29, 1873	927	.....	4	119
Wardrobe, bedstead, chair, and table, Combined.....	W. Getchell.....	142,387	Sept. 2, 1873	61	20	4	247
Wardrobe, Portable.....	J. N. Fowler.....	140,130	June 24, 1873	651	295	3	693
Warp-threads, Rod for drawing in.....	M. S. Jordan.....	144,620	Nov. 18, 1873	395	132	4	533
Warping-machine.....	J. B. Bancroft.....	135,619	Feb. 11, 1873	223	70	3	157
Warping-machine, Stop-mechanism for.....	G. S. Follansbee and T. C. Entwistle.	137,605	Apr. 8, 1873	301	93	3	393
Wash-basin waste-trap.....	H. H. Craigie.....	135,206	Jan. 28, 1873	669	215	3	101
Wash-bench.....	A. G. Emery.....	143,562	Oct. 14, 1873	156	52	4	402
Wash-bench for wringing-machines.....	J. B. Sweetland.....	136,788	Mar. 11, 1873	392	129	3	286
Wash-board.....	G. Elsey.....	138,140	Apr. 22, 1873	790	252	3	455
Wash-board.....	J. B. Fisher.....	136,828	Mar. 18, 1873	439	145	3	299
Wash-board.....	J. T. and F. T. McNally.....	134,607	Jan. 7, 1873	103	33	3	15
Wash board and roller, Brush.....	I. Hussey.....	142,853	Sept. 16, 1873	475	162	4	303
Wash board and rubber.....	C. Krebs.....	137,847	Apr. 15, 1873	524	164	3	424
Wash-boiler.....	J. Adams.....	139,349	May 27, 1873	811	259	3	594
Wash-boiler.....	S. W. Bartholomew.....	140,238	June 24, 1873	740	234	3	700
Wash-boiler.....	J. H. Batchelder and S. J. Sargent..	138,603	May '6, 1873	117	39	3	507
Wash-boiler.....	M. M. Beard.....	136,125	Feb. 25, 1873	690	223	3	219
Wash-boiler.....	A. Becker.....	140,398	July 1, 1873	51	18	4	12
Wash-boiler.....	M. J. Clapper.....	140,470	July 1, 1873	109	37	4	17
Wash-boiler.....	S. Covey and O. A. Slafter.....	138,738	May 13, 1873	254	79	3	528
Wash-boiler.....	J. Cramer.....	138,739	May 13, 1873	255	79	3	528
Wash-boiler.....	O. E. Culver and L. E. Moseley..	145,558	Dec. 16, 1873	477	156	4	648
Wash-boiler.....	J. W. Deming.....	139,301	May 27, 1873	777	246	3	591
Wash-boiler.....	C. H. Dunbrack.....	137,663	Apr. 8, 1873	351	108	3	397
Wash-boiler.....	W. Exner.....	137,902	Apr. 15, 1873	572	179	3	428
Wash-boiler.....	W. G. Gibson.....	138,632	May 6, 1873	146	47	3	509
Wash-boiler.....	O. F. Glidden.....	137,545	Apr. 8, 1873	250	76	3	389
Wash-boiler.....	W. H. Hammond.....	144,761	Nov. 18, 1873	512	174	4	543
Wash-boiler.....	R. J. Harrison.....	144,336	Nov. 4, 1873	135	45	4	489
Wash-boiler.....	P. Krumscheid.....	137,612	Apr. 8, 1873	306	95	3	393
Wash-boiler.....	R. Langenbach.....	138,167	Apr. 22, 1873	814	259	3	457
Wash-boiler.....	R. Lawyer.....	135,349	Jan. 28, 1873	799	258	3	112
Wash-boiler.....	R. Lawyer.....	144,774	Nov. 18, 1873	523	177	4	544
Wash-boiler.....	E. H. McDonald.....	140,936	July 15, 1873	537	179	4	71
Wash-boiler.....	J. R. Pendell.....	138,576	May 6, 1873	98	31	3	505
Wash-boiler.....	W. Reinemer.....	144,795	Nov. 18, 1873	539	183	4	545
Wash-boiler.....	J. Reinig.....	138,285	Apr. 29, 1873	253	300	3	476
Wash-boiler.....	H. Ross.....	146,022	Dec. 30, 1873	910	295	4	705
Wash-boiler.....	F. J. Schirmayer.....	138,586	May 6, 1873	105	34	3	506
Wash-boiler.....	E. Schofield.....	142,518	Sept. 2, 1873	175	58	4	256
Wash-boiler.....	A. Sluthour.....	135,374	Jan. 28, 1873	823	265	3	114
Wash-boiler.....	W. J. Thomas.....	140,444	July 1, 1873	85	29	4	15
Wash-boiler.....	J. C. Tilton.....	136,283	Feb. 25, 1873	826	267	3	230
Wash-boiler.....	J. C. Tilton.....	145,767	Dec. 23, 1873	668	218	4	676
Wash-boiler.....	L. W. Truesdell and F. Curtis..	143,796	Oct. 21, 1873	386	128	4	430
Wash-boiler.....	W. W. Turtelot.....	145,318	Dec. 9, 1873	258	86	4	613
Wash-boiler attachment.....	H. Bickel.....	135,069	Jan. 21, 1873	535	173	3	78
Wash-boiler attachment.....	C. P. Chapman.....	141,322	July 29, 1873	919	300	4	119
Wash-boiler attachment.....	E. Davis.....	141,429	Aug. 5, 1873	18	5	4	136
Wash-boiler attachment.....	W. W. Glanville.....	144,531	Nov. 11, 1873	310	104	4	515
Wash-boiler attachment.....	R. B. Hart.....	135,708	Feb. 11, 1873	303	96	3	163
Wash-boiler attachment.....	S. B. Hartman.....	134,800	Jan. 14, 1873	283	92	3	43
Wash-boiler attachment.....	R. Jeffers and D. C. Bockoven..	135,225	Jan. 28, 1873	688	221	3	103
Wash-boiler attachment.....	M. Martin.....	135,569	Feb. 4, 1873	162	52	3	140
Wash-boiler attachment.....	R. A. McCauley.....	134,999	Jan. 21, 1873	472	151	3	73
Wash-boiler attachment.....	C. D. Reinking.....	136,385	Mar. 4, 1873	30	11	3	248
Wash-boiler attachment.....	W. E. Rice and J. Barnes.....	139,918	June 17, 1873	452	140	3	668
Wash-boiler attachment.....	I. C. Schramm.....	140,546	July 1, 1873	174	59	4	22
Wash-boiler attachment.....	T. Shuman.....	137,492	Apr. 1, 1873	197	60	3	373
Wash-boiler attachment.....	N. C. Warner.....	136,686	Mar. 11, 1873	307	101	3	279
Wash-boiler attachment.....	H. W. Williams.....	138,974	May 13, 1873	451	142	3	545
Wash-pounder.....	L. S. Enos.....	140,261	June 24, 1873	760	240	3	702
Wash-stand.....	A. H. Lorton.....	134,903	Jan. 14, 1873	376	120	3	50
Wash-tub holder.....	A. M. Olds.....	137,473	Apr. 1, 1873	175	56	3	371
Wash-tub, Stationary.....	B. Morahan.....	139,684	June 10, 1873	225	72	3	643
Wash-tub, Stationary.....	B. Morahan.....	139,685	June 10, 1873	225	72	3	643
Wash-tub support.....	E. F. Shaw.....	139,925	June 17, 1873	457	143	3	669
Wash-tub support.....	G. F. Shaw.....	143,469	Oct. 7, 1873	59	21	4	385
Washer:							
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Washer-cutter.	H. E. Whipple	143, 738	Oct. 14, 1873	318	106	4	414
Washers, Die for punching.	R. Humphrey	141, 055	July 22, 1873	654	220	4	90
Washing-fluid	N. W. Lane	141, 364	July 29, 1873	965		4	122
Washing-implement	C. R. Gramm	138, 495	May 6, 1873	23	8	3	499
Washing-machine	J. E. Anderson	139, 992	June 17, 1873	505	160	3	673
Washing-machine	J. Ballard	137, 046	Mar. 25, 1873	633	209	3	326
Washing-machine	L. Beaulien	139, 107	May 20, 1873	583	183	3	568
Washing-machine	J. Bennett	143, 869	Oct. 21, 1873	450	150	4	435
Washing-machine	S. Berry	135, 261	Jan. 28, 1873	722	231	3	105
Washing-machine	E. S. Bliss	139, 940	June 17, 1873	468	147	3	669
Washing-machine	B. W. Bowen	141, 850	Aug. 19, 1873	409	133	4	186
Washing-machine	W. P. Brooks	135, 318	Jan. 28, 1873	768	248	3	109
Washing-machine	W. P. Brooks and J. D. Hartzell	138, 374	Apr. 29, 1873	1, 027	324	3	482
Washing-machine	I. F. Brown	141, 200	July 29, 1873	803	262	4	109
Washing-machine	S. Budlong	142, 676	Sept. 9, 1873	318	106	4	279
Washing-machine	J. C. Burgner	138, 128	Apr. 22, 1873	780	249	3	454
Washing-machine	A. H. Calkins	138, 733	May 13, 1873	250	78	3	527
Washing-machine	A. H. Calkins	138, 734	May 13, 1873	251	78	3	528
Washing-machine	A. M. Campbell	143, 060	Sept. 23, 1873	658	225	4	328
Washing-machine	H. H. Case	137, 177	Mar. 25, 1873	750	248	3	335
Washing-machine	T. Clucas, jr.	136, 135	Feb. 25, 1873	703	227	3	220
Washing-machine	G. J. Colby	138, 379	Apr. 29, 1873	1, 031	325	3	482
Washing-machine	C. Cole	136, 970	Mar. 18, 1873	555	184	3	308
Washing-machine	T. Colvin and R. M. Patchen	143, 123	Sept. 23, 1873	705	242	4	332
Washing-machine	J. W. Conroy	140, 812	July 15, 1873	423	143	4	62
Washing-machine	G. G. Curtis	143, 749	Oct. 21, 1873	347	116	4	426
Washing-machine	P. G. Dahmer	139, 497	June 3, 1873	49	15	3	613
Washing-machine	G. R. Davis	136, 219	Feb. 25, 1873	767	248	3	225
Washing-machine	L. H. Davis	143, 225	Sept. 30, 1873	793	273	4	355
Washing-machine	H. Dextor	138, 319	Apr. 29, 1873	985	{ 309 } 310	3	478
Washing-machine	E. Dickerman	138, 235	Apr. 29, 1873	900	284	3	472
Washing-machine	P. C. Dillan	136, 908	Mar. 18, 1873	503	166	3	304
Washing-machine	D. B. Dorsey	141, 924	Aug. 19, 1873	479	158	4	191
Washing-machine	P. A. Downer	137, 661	Apr. 8, 1873	350	108	3	397
Washing-machine	B. Edgar	135, 211	Jan. 28, 1873	673	{ 217 } 218	3	102
Washing-machine	O. B. Evans	136, 825	Mar. 18, 1873	437	145	3	299
Washing-machine	G. W. Fagaines	138, 387	Apr. 29, 1873	1, 037	327	3	483
Washing-machine	A. Filkins	139, 135	May 20, 1873	612	191	3	570
Washing-machine	J. B. Fisher	136, 909	Mar. 18, 1873	504	167	3	304
Washing-machine	W. K. Flitstra	140, 620	July 8, 1873	254	86	4	40
Washing-machine	W. H. Freed	136, 050	Feb. 18, 1873	607	200	3	201
Washing-machine	J. Glines	141, 044	July 22, 1873	647	218	4	89
Washing-machine	A. Gregg	139, 889	June 17, 1873	425	132	3	666
Washing-machine	H. C. Grover	141, 136	July 22, 1873	730	242	4	96
Washing-machine	J. W. Hannah	139, 576	June 3, 1873	113	38	3	618
Washing-machine	J. D. Hartzell	138, 802	May 13, 1873	309	95	3	533
Washing-machine	S. Hawkins	140, 037	June 17, 1873	550	{ 173 } 174	3	677
Washing-machine	M. L. Hawks	140, 625	July 8, 1873	258	87	4	41
Washing-machine	M. L. Hawks	145, 799	Dec. 23, 1873	693	227	4	678
Washing-machine	D. W. Helfrich	138, 330	Apr. 29, 1873	993	312	3	979
Washing-machine	F. W. Henson	135, 805	Feb. 11, 1873	392	126	3	170
Washing-machine	P. Hibbs	146, 071	Dec. 30, 1873	951	307	4	709
Washing-machine	J. H. Hill	142, 850	Sept. 16, 1873	474	161	4	303
Washing-machine	E. M. Hodgson	139, 313	May 27, 1873	787	250	3	592
Washing-machine	L. Holderman	145, 946	Dec. 16, 1873	846	275	4	700
Washing-machine	J. Hoover	139, 790	June 10, 1873	330	102	3	651
Washing-machine	E. Hoyt	135, 808	Feb. 11, 1873	393	127	3	170
Washing-machine	F. Hulet	137, 206	Mar. 25, 1873	779	257	3	337
Washing-machine	A. W. Jennings	139, 159	May 20, 1873	638	199	3	572
Washing-machine	T. F. Kiff	142, 242	Aug. 26, 1873	773	254	4	224
Washing-machine	J. H. Kooser	141, 567	Aug. 5, 1873	137	43	4	146
Washing-machine	J. H. Kruse	137, 218	Mar. 25, 1873	790	261	3	338
Washing-machine	M. N. Lovell	139, 511	June 3, 1873	59	19	3	613
Washing-machine	H. H. Marcar and S. Mehaffey	142, 255	Aug. 26, 1873	782	258	4	225
Washing-machine	S. Martin	140, 380	July 1, 1873	38	12, 13	4	11
Washing-machine	W. E. Millegan	136, 929	Mar. 18, 1873	521	172	3	305
Washing-machine	H. Meyers	136, 855	Mar. 18, 1873	460	152	3	301
Washing-machine	D. B. Meyers	143, 177	Sept. 23, 1873	743	256	4	335
Washing-machine	G. S. Newsom	143, 371	Sept. 30, 1873	926	314	4	366
Washing-machine	F. M. Nixon and E. N. Babcock	143, 709	Oct. 14, 1873	292	96	3	412
Washing-machine	E. Norton	134, 816	Jan. 14, 1873	299	96	3	44
Washing-machine	A. O'Dell	137, 234	Mar. 25, 1873	803	265	3	339
Washing-machine	A. M. Olds	134, 609	Jan. 7, 1873	104	34	3	15
Washing-machine	D. J. Owen and J. G. Brydges	136, 335	Feb. 25, 1873	870	280	3	233
Washing-machine	S. N. Page	146, 091	Dec. 30, 1873	970	313	4	710
Washing-machine	W. Parker	142, 268	Aug. 26, 1873	792	261	4	226
Washing-machine	N. J. Parsons	143, 779	Oct. 21, 1873	373	123	4	429
Washing-machine	D. B. Pond	138, 928	May 13, 1873	415	130	3	542
Washing-machine	E. Potts	134, 769	Jan. 14, 1873	257	84	3	41
Washing-machine	F. B. Preston	140, 641	July 8, 1873	271	92	4	42
Washing-machine	N. F. Reed	139, 736	June 10, 1873	282	87	3	647
Washing-machine	L. Reed	139, 815	June 10, 1873	352	109	3	653

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Washing-machine	W. M. Rowland	140, 435	July 1, 1873	77	27	4	14
Washing-machine	G. Seymour	137, 151	Mar. 25, 1873	724	241	3	333
Washing-machine	J. Sheffler	140, 651	July 8, 1873	279	94	4	42
Washing-machine	C. W. Sherer	142, 742	Sept. 9, 1873	375	126	4	284
Washing-machine	S. Short	145, 911	Dec. 23, 1873	791	259	4	685
Washing-machine	E. Smith	137, 494	Apr. 1, 1873	198	61	3	373
Washing-machine	J. Q. A. Smith	142, 523	Sept. 2, 1873	179	59	4	256
Washing-machine	M. W. Staples	142, 958	Sept. 16, 1873	565	191	4	310
Washing-machine	M. W. Staples	144, 365	Nov. 4, 1873	161	53	4	491
Washing-machine	J. C. Stewart	144, 237	Nov. 4, 1873	61	19	4	483
Washing-machine	J. Strahl	135, 859	Feb. 11, 1873	433	141	3	173
Washing-machine	L. H. Strobridge	140, 558	July 1, 1873	185	63	4	23
Washing-machine	H. Stuckman	136, 787	Mar. 11, 1873	391	129	3	286
Washing-machine	J. Taber	138, 296	Apr. 29, 1873	965	303	3	477
Washing-machine	J. W. Taylor	141, 402	July 29, 1873	1,001	325	4	125
Washing-machine	S. J. Taylor	139, 342	May 27, 1873	805	257	3	594
Washing-machine	J. Trickett	144, 805	Nov. 18, 1873	549	186	4	546
Washing-machine	J. W. Tull and J. W. Weston	145, 602	Dec. 16, 1873	512	168	4	651
Washing-machine	A. Van Allen	138, 597	May 6, 1873	113	37	3	507
Washing-machine	G. W. Wageoner	139, 093	May 20, 1873	572	179	3	567
Washing-machine	G. S. Walker	142, 535	Sept. 2, 1873	191	62	4	257
Washing-machine	W. R. Walton	141, 022	July 22, 1873	629	212	4	88
Washing-machine	C. Watson	136, 474	Mar. 4, 1873	106	35	3	254
Washing-machine	P. B. Watson	138, 969	May 13, 1873	447	140	3	544
Washing-machine	V. White	138, 970	May 13, 1873	448	141	3	544
Washing-machine	F. M. Wideman	143, 209	Sept. 23, 1873	773	266	4	338
Washing-machine	J. Wilbur	135, 955	Feb. 18, 1873	526	172	3	194
Washing-machine	N. O. Wilcox	138, 110	Apr. 22, 1873	768	244	3	453
Washing-machine	B. A. Williams	137, 161	Mar. 25, 1873	734	244	3	334
Washing-machine	A. M. Wilson	142, 313	Aug. 26, 1873	827	274	4	229
Washing-machine	G. L. Witsil	140, 753	July 8, 1873	365	123	4	49
Washing-machine	W. S. Young	139, 100	May 20, 1873	576	181	3	568
Washing printed or bleached goods, Apparatus for	B. G. Brooks	135, 518	Feb. 4, 1873	110	35	3	136
Waste-trap	W. A. Shaw and C. C. Tracy	139, 739	June 10, 1873	284	88	3	648
Watch	A. Frankfeld	144, 270	Nov. 4, 1873	85	28	4	485
Watch and other time-pieces of aluminium-compound, Manufacture of spring for	F. A. Lange	139, 678	June 10, 1873	219	.....	3	643
Watch-balance, Attaching hair-spring to	J. Shaw	135, 248	Jan. 28, 1873	714	228	3	105
Watch-barrel	F. A. Giles	145, 939	Dec. 16, 1873	838	273	4	700
Watch, Calendar	D. J. Mozart	141, 161	July 22, 1873	756	249	4	98
Watch-case	J. C. Dueber	139, 779	June 10, 1873	321	100	3	650
Watch-case caps and backs, Die for making	S. C. Lewis	140, 424	July 1, 1873	68	24	4	14
Watch-case center, Manufacture of	J. C. Dueber	141, 861	Aug. 19, 1873	418	136	4	186
Watch-case latch	J. C. Dueber	142, 684	Sept. 9, 1873	324	108	4	280
Watch-case spring	U. A. Juoet	143, 983	Oct. 28, 1873	568	188	4	455
Watch-case spring	J. Laurent and J. Menegay	135, 348	Jan. 28, 1873	798	258	3	112
Watch-case, Spring-joint for	J. Gordon	141, 045	July 22, 1873	647	218	4	89
Watch-chain	P. Frontier and A. Bellemere	145, 642	Dec. 16, 1873	548	180	4	654
Watch-chain and bracelet, Manufacture of	W. C. Edge	143, 503	Oct. 7, 1873	89	30	4	388
Watch-chain catch	L. C. Thiery	136, 190	Feb. 25, 1873	747	241	3	223
Watch-escapement	D. J. Mozart	140, 944	July 15, 1873	544	183	4	72
Watch-gear cutting-machine	A. Durini	144, 266	Nov. 4, 1873	82	27	4	485
Watch, Hair-spring stud for	J. P. Adams	140, 231	June 24, 1873	735	232	3	700
Watch, Hand-setting	F. A. Jones	140, 581	July 8, 1873	218	73	4	37
Watch-key	F. E. Allen and S. G. Hall	138, 779	May 13, 1873	290	89	3	531
Watch-key	F. E. Allen and S. G. Hall	143, 653	Oct. 14, 1873	233	78	4	408
Watch-key and screw-driver combined	G. P. Reed and H. P. Day	138, 528	May 6, 1873	55	19	3	502
Watch, Mainspring attachment for	S. S. Morrill	137, 468	Apr. 1, 1873	171	54	3	371
Watch, Mainspring safety-attachment for	R. Gove	137, 437	Apr. 1, 1873	142	46	3	368
Watch regulator	N. Staffin	140, 090	June 17, 1873	597	188	3	680
Watch, Reversible center-pinion for	O. Gates	144, 897	Nov. 25, 1873	635	216	4	564
Watch, Reversible pinion for	G. Hunt	142, 789	Sept. 16, 1873	426	144	4	298
Watch, Reversible pinion for	F. Pickert	138, 187	Apr. 22, 1873	838	265	3	459
Watch, Self-winding	D. J. Mozart	141, 373	July 29, 1873	972	316	4	123
Watch, Stem winding and setting	C. A. Montandon	135, 241	Jan. 28, 1873	706	226	3	104
Watch, Stem winding and setting	U. Nardin	145, 070	Dec. 2, 1873	28	9	4	587
Watch, Stem winding and setting	E. J. Pacaud	144, 859	Nov. 25, 1873	610	207	4	561
Watch, Stem winding and setting	G. P. Reed	139, 735	June 10, 1873	279	87	3	647
Watch, Winding and setting	C. E. Jacot	135, 559	Feb. 4, 1873	153	49	3	139
Watch, Winding click	S. C. Smith	138, 350	Apr. 29, 1873	1,008	317	3	481
Watches, Double-stop movement for	A. Frankfeld	143, 619	Oct. 14, 1873	207	70	4	406
Watches, Manufacture of push-top for	J. C. Dueber	141, 125	July 22, 1873	718	239	4	95
Watchmakers' chain-clamp	C. E. Evard	143, 131	Sept. 23, 1873	710	244	4	332
Watchmakers' staking-tool	J. Stöck	143, 857	Oct. 21, 1873	441	147	4	434
Water and beer cooler	C. Hubing	136, 600	Mar. 11, 1873	235	80	3	273
Water and gas pipe, Machine for introducing	J. Fritz and W. C. Pooley	139, 566	June 3, 1873	105	35	3	617
Water and gas pipes, Mode of connecting cement	G. C. Nichols	137, 562	Apr. 8, 1873	264	81	3	390
Water by direct condensation of air, Apparatus for forcing	J. M. Brooke	139, 538	June 3, 1873	79	27	3	615
Water chemically and mechanically, System of purifying	G. Demailly	143, 676	Oct. 14, 1873	254	85	4	410
Water-closet	J. Albee	136, 199	Feb. 25, 1873	753	243	3	224
Water-closet	J. G. Jennings	137, 082	Mar. 18, 1873	669	222	3	328
Water-closet	J. F. Neilson	145, 586	Dec. 16, 1873	499	164	4	650
Water-closet	P. C. Rowe	138, 287	Apr. 29, 1873	954	300	3	476
Water-closet	J. H. Stevens	140, 797	July 15, 1873	406	138	4	61
Water-closet and urinal, Ventilating	R. D. O. Smith	136, 105	Feb. 18, 1873	657	215	3	204
Water-closet bowl, Ventilating	J. V. Mathivet	138, 267	Apr. 29, 1873	933	295	3	475
Water-closet for vessels	W. Bishop	141, 482	Aug. 5, 1873	64	20	4	140
Water-closet, Portable	T. Barrett	139, 531	June 3, 1873	74	25	3	615
Water-cooler	I. Brach	142, 986	Sept. 23, 1873	593	202	4	323
Water-cooler	J. E. Cammeyer	143, 058	Sept. 23, 1873	657	225	4	328
Water-cooler	W. S. Kimball	140, 712	July 8, 1873	329	112	4	46

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Water-cooler	W. F. Rutter	146,099	Dec. 30, 1873	978	316	4	711
Water-cooler	T. Smith	142,178	Aug. 26, 1873	718	237	4	220
Water-cooler and filter combined	W. J. English	142,620	Sept. 9, 1873	272	89	4	276
Water-cooler and show-case combined	P. J. Hanour	140,777	July 15, 1873	388	133	4	59
Water-cooler, False bottom for	J. F. Wood	144,587	Nov. 11, 1873	358	121	4	519
Water-cooler, Refrigerator	T. Smith	137,867	Apr. 15, 1873	540	168	3	425
Water-elevator	J. A. Ayres	137,754	Apr. 15, 1873	442	{ 137 138 }	{ 3 3 }	{ 417 45 }
Water-elevator	A. Balding	134,835	Jan. 14, 1873	318	101	3	45
Water-elevator	T. Bell	138,312	Apr. 29, 1873	978	307	3	478
Water-elevator	S. Bennett	140,808	July 15, 1873	415	141	4	61
Water-elevator	J. B. Erwin	141,212	July 29, 1873	819	{ 267 268 }	{ 4 4 }	{ 110 246 }
Water-elevator	J. B. Erwin and G. H. Shoulters	136,368	Mar. 4, 1873	13	5	3	246
Water-elevator	T. Fowlds, jr.	135,104	Jan. 21, 1873	560	182	3	80
Water-elevator	D. J. McMillen	146,086	Dec. 30, 1873	964	311	4	710
Water-elevator and injector, Steam	A. W. Cram	135,091	Jan. 21, 1873	548	179	3	79
Water-elevator, Pneumatic	J. M. Blanchard and W. E. Prall	140,879	July 15, 1873	474	161	4	66
Water-elevator, Steam	A. D. Brock	135,765	Feb. 11, 1873	349	112	3	167
Water-elevator, Steam and vacuum	J. C. Wightman	141,249	July 29, 1873	855	279	4	113
Water from mines, Purifying	H. Burgess	144,737	Nov. 18, 1873	490	.....	4	541
Water-gage alarm and register, Electrical	C. Heisler	144,540	Nov. 11, 1873	319	108	4	515
Water-gage and feed-indicator for steam-boilers	A. S. Goodrich	138,882	May 13, 1873	380	119	3	539
Water-gage, Boiler	C. G. and B. M. Martin	144,686	Nov. 18, 1873	449	152	4	538
Water-heater	T. M. Carroll	144,060	Oct. 28, 1873	637	209	4	466
Water-heater	J. Kenfield, jr.	135,921	Feb. 18, 1873	500	162	3	132
Water-heater	I. S. Mead	142,035	Aug. 19, 1873	577	190	4	199
Water-heater	A. Spence	145,457	Dec. 9, 1873	371	{ 123 124 }	{ 4 4 }	{ 627 82 }
Water-heater for heating buildings	A. Marriott	135,135	Jan. 21, 1873	587	191	3	82
Water-indicator, Steam-boiler	A. P. Pitkin	138,524	May 6, 1873	52	17	3	502
Water-main, Attachment-stop for	W. Young	137,399	Apr. 1, 1873	106	34	3	365
Water-main, Stop-gate in	D. C. Cregier	141,426	Aug. 5, 1873	15	4	4	136
Water-meter	E. E. P. Clausolles	136,363	Mar. 4, 1873	8	3, 4	3	246
Water-meter	T. T. Prosser	142,650	Sept. 9, 1873	294	97	4	277
Water-meter	A. M. Rouse	138,697	May 6, 1873	203	64	3	514
Water-meter	A. M. Rouse	140,731	July 8, 1873	343	116	4	48
Water-meter, Automatic	F. D. Bellido	144,498	Nov. 11, 1873	281	95	4	513
Water-meter, Manufacture of rubber diaphragms for	D. B. Spooner	145,762	Dec. 23, 1873	664	217	4	675
Water-pipes, Hydraulic cushion for	W. Rickets	144,141	Oct. 28, 1873	701	233	4	466
Water-proof furze fabric	S. H. Atkins	136,636	Mar. 11, 1873	267	89	3	276
Water-proof gum from flax-seed, &c., Preparing	D. M. Lamb	140,283	June 24, 1873	780	.....	3	704
Water-proof gum, Production of	D. M. Lamb	140,281	June 24, 1873	779	.....	3	703
Water-proof gum, Production of	D. M. Lamb	140,282	June 24, 1873	780	.....	3	704
Water-proof material	X. Karcheski	137,451	Apr. 1, 1873	153	.....	3	369
Water-proof, Process of rendering fibrous and textile material	X. Karcheski	137,452	Apr. 1, 1873	154	.....	3	369
Water-proofing compound for canvas and other fabrics	P. H. Morgan	139,017	May 20, 1873	502	.....	3	562
Water-raising apparatus	L. Chase	143,882	Oct. 21, 1873	461	{ 154 155 }	{ 4 4 }	{ 436 199 }
Water-regulator	J. P. Bolin	136,024	Feb. 18, 1873	586	193	3	199
Water-regulator and alarm for boiler	R. Safley	139,194	May 20, 1873	668	209	3	575
Water-regulator for boilers	C. J. Weld	141,302	July 29, 1873	901	295	4	117
Water-tank, Hotel	J. H. Corey	144,834	Nov. 25, 1873	584	{ 199 200 }	{ 4 4 }	{ 559 220 }
Water-tank, Railway stock-car	J. B. Calkins	136,132	Feb. 25, 1873	699	226	3	220
Water-traps, Device for forming	W. A. Butler	143,665	Oct. 14, 1873	244	82	4	409
Water-traps, Device for forming	W. A. Butler	144,057	Oct. 28, 1873	633	209	4	460
Water-traps, Making	R. Cunningham	139,946	June 17, 1873	472	148	3	670
Water-traps, Manufacture of	W. A. Butler	143,326	Sept. 30, 1873	880	301	4	362
Water-traps, Mold for casting	W. A. Butler	143,327	Sept. 30, 1873	881	301	4	362
Water-wheel	J. Abell and A. D. Cole	138,979	May 20, 1873	468	147	3	559
Water-wheel	T. J. Alcott	139,699	June 10, 1873	246	77, 78	3	645
Water-wheel	B. J. Barber	144,944	Nov. 25, 1873	674	228	4	567
Water-wheel	O. J. Bollinger	140,401	July 1, 1873	54	19	4	12
Water-wheel	J. T. Case	134,731	Jan. 14, 1873	228	73	3	39
Water-wheel	M. Chandler	145,987	Dec. 30, 1873	880	285	4	703
Water-wheel	N. J. Colman	135,891	Feb. 18, 1873	477	154	3	191
Water-wheel	G. Cox	134,520	Jan. 7, 1873	17	6	3	9
Water-wheel	G. Curtis	144,261	Nov. 4, 1873	78	25	4	484
Water-wheel	W. C. Edwards	138,621	May 6, 1873	133	44	3	508
Water-wheel	E. Hackett	142,228	Aug. 26, 1873	760	250	4	223
Water-wheel	J. B. Hamilton	146,068	Dec. 30, 1873	949	306	4	709
Water-wheel	M. H. Heylman	145,346	Dec. 9, 1873	280	93	4	620
Water-wheel	J. F. Kirkhart and J. Ramsay	143,984	Oct. 28, 1873	568	189	4	455
Water-wheel	J. Kunkle	145,740	Dec. 23, 1873	643	{ 210 211 }	{ 4 4 }	{ 674 333 }
Water-wheel	J. Nolan	137,146	Mar. 25, 1873	720	239	3	333
Water-wheel	E. Overton	142,862	Sept. 16, 1873	483	165	4	303
Water-wheel	E. R. Percy	141,074	July 22, 1873	674	226	4	91
Water-wheel	A. B. Reniff	138,933	May 13, 1873	419	131	3	542
Water-wheel	N. C. Roberts	140,544	July 1, 1873	171	58	4	22
Water-wheel	I. S. Roland	140,593	July 8, 1873	230	77	4	38
Water-wheel	B. Ruof	137,242	Mar. 25, 1873	811	267	3	339
Water-wheel	B. Stetson	141,826	Aug. 12, 1873	380	124	4	173
Water-wheel	J. Taney	143,040	Sept. 23, 1873	641	220	4	326
Water-wheel	S. T. Teachout	139,344	May 27, 1873	807	258	3	594
Water-wheel	H. B. Weaver	137,580	Apr. 8, 1873	281	87	3	391
Water-wheel	A. N. Wolf	141,616	Aug. 5, 1873	180	57	4	150
Water-wheel, Adjustable chute for turbine	J. Abell	138,978	May 20, 1873	467	147	3	559
Water-wheel, Bucket-turbine	S. L. Denney	135,412	Feb. 4, 1873	17	5	3	129
Water-wheel gate	J. M. Burghardt	137,822	Apr. 15, 1873	502	157	3	422
Water-wheel, Turbine	J. N. & L. M. Asbury	136,298	Feb. 25, 1873	839	271	3	231
Water-wheel, Turbine	E. P. H. Capron	141,759	Aug. 12, 1873	318	104	4	169
Water-wheel, Turbine	W. H. Elmer	137,666	Apr. 8, 1873	354	109	3	397

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Water-wheel, Turbine	J. C. Green	137,836	Apr. 15, 1873	516	161	3	423
Water-wheel, Turbine	W. P. Hale	135,707	Feb. 11, 1873	303	96	3	163
Water-wheel, Turbine	J. Harris	136,372	Mar. 4, 1873	20	7	3	247
Water-wheel, Turbine	A. A. Herriman	142,628	Sept. 9, 1873	277	91	4	276
Water-wheel, Turbine	T. H. Risdon and W. W. Tyler	135,367	Jan. 28, 1873	817	264	3	113
Water-wheel, Turbine	I. Sherck	144,363	Nov. 4, 1873	159	53	4	491
Water-wheel, Turbine	S. M. Stevens	136,784	Mar. 11, 1873	389	123	3	285
Water-wheel, Turbine	H. Van De Water	140,602	July 8, 1873	239	81	4	39
Water-wheel, Turbine	J. E. Whiting	143,312	Sept. 30, 1873	868	297	4	362
Water-wheel, Turbine	A. Wrealsh	135,503	Feb. 4, 1873	100	31, 32	3	135
Water-wheel, Turbine	P. W. Yarrell	135,459	Feb. 4, 1873	63	20	3	132
Water-works, Stand-pipe for	G. W. Pearsons	143,711	Oct. 14, 1873	294	96	4	412
Wave-power	C. Buckner	138,474	May 6, 1873	8	3	3	498
Waxed ends, Apparatus for preparing	W. May	134,998	Jan. 21, 1873	472	151	3	73
Way, Elevated	H. W. Farley	137,667	Apr. 8, 1873	355	110	3	397
Way-meter for wheel vehicles	J. A. Robinson	145,527	Dec. 16, 1873	452	148	4	646
Weather-guard	J. Pease	145,750	Dec. 23, 1873	651	213	4	674
Weather-guard for doors	C. A. Wood	142,542	Sept. 2, 1873	197	64	4	258
Weather-strip	J. and G. Bacon	138,065	Apr. 22, 1873	733	232	3	450
Weather-strip	O. W. Booth	145,616	Dec. 16, 1873	524	172	4	652
Weather-strip	J. W. Browne	143,324	Sept. 30, 1873	878	300	4	362
Weather-strip	I. Case	135,627	Feb. 11, 1873	231	73	3	158
Weather-strip	C. B. Rager	145,239	Dec. 2, 1873	180	62	4	599
Weather-strip	F. Siering	141,176	July 22, 1873	774	253	4	99
Weather-strip	O. A. Vorce	145,820	Dec. 23, 1873	708	233	4	679
Weather-strip, Window	G. P. Potter	140,640	July 8, 1873	271	92	4	42
Weather-threshold	J. W. Kramer	135,132	Jan. 21, 1873	585	190	3	82
Weather-threshold	J. P. Stark	142,132	Aug. 26, 1873	681	224	4	217
Weavers' harness, Machine for making	J. H. Crowell	144,320	Nov. 4, 1873	123	41	4	488
Weavers' harness, Machine for making	J. H. Crowell	145,282	Dec. 9, 1873	223	76	4	616
Webbing, Machine for cutting	W. H. Rice	139,616	June 3, 1873	150	50	3	621
Weigher, Automatic grain	J. W. Hill	144,541	Nov. 11, 1873	320	108	4	516
Weighing-attachment for wagons	J. W. Hill	140,826	July 15, 1873	433	147	4	63
Weighing-scales, Bag-holder	H. T. Budge and N. W. Russell	138,315	Apr. 29, 1873	980	308	3	478
Weights, Apparatus for lowering	T. Wrightson	143,802	Oct. 21, 1873	394	130	4	430
Welding copper	E. Renaud	145,686	Dec. 16, 1873	584	.....	4	657
Welding iron and steel	J. Popping	142,939	Sept. 16, 1873	549	.....	4	309
Welding machine, Tube	J. Sacler	135,160	Jan. 21, 1873	606	197	3	84
Welding steel to cast iron, Process of	J. H. Smith	140,087	June 17, 1873	596	.....	3	680
Well	A. Curtis	139,947	June 17, 1873	473	149	3	670
Well-boring, artesian	W. McPherson	138,174	Apr. 22, 1873	822	261	3	457
Well-boring drill	T. Phillips and J. Golletz	144,475	Nov. 11, 1873	262	88	4	511
Well-boring machine	J. A. King	135,129	Jan. 21, 1873	583	189	3	82
Well-cleaning device	W. F. Brown	137,529	Apr. 8, 1873	237	72	3	387
Well-curb	N. H. Lindley	137,555	Apr. 8, 1873	258	79	3	389
Well-drill	G. Koch	144,550	Nov. 11, 1873	328	110	4	516
Well drills, Mechanism for effecting rotary motion of oil	G. A. Hinckley	134,889	Jan. 14, 1873	363	116	3	49
Well drills, Mechanism for operating and feeding oil	G. A. Hinckley	135,988	Feb. 18, 1873	555	183	3	197
Well, Driven	J. Large	135,718	Feb. 11, 1873	310	98	3	164
Well, Driven	G. W. Storer	140,963	July 15, 1873	563	188	4	73
Well, Driven	A. Wilson	140,665	July 8, 1873	289	98	4	43
Well, Driven or bored	J. E. Morrison	139,018	May 20, 1873	503	154	3	562
Well points, Machine for perforating drive	C. L. Travis	141,188	July 22, 1873	784	{ 256 } { 257 }	{ 4 } { 4 }	100
Well, Draw-point for driven	W. P. Smith	135,016	Jan. 21, 1873	490	157	3	74
Well tubing, Oil	J. Moloney	142,861	Sept. 16, 1873	482	164	4	303
Wells, Apparatus for lowering pipes in	S. P. Okerlund	141,233	July 29, 1873	838	273	4	112
Wells, Apparatus for raising oil, &c., from	H. W. Faucett	140,692	July 8, 1873	313	106	4	45
Wells, Cleaning oil	J. J. Looney	139,010	May 20, 1873	497	.....	3	561
Wells, Device for steaming oil	T. B. Carothers	139,656	June 10, 1873	199	65	3	641
Wells, Drill for boring artesian	C. G. Cross	142,992	Sept. 23, 1873	599	203	4	323
Wells, Extracting tubular casing from oil	H. Harris	136,992	Mar. 18, 1873	573	191	3	310
Wells, Hanger for walking-beams for oil	M. Heulings and W. J. Innis	134,807	Jan. 14, 1873	293	94	3	44
Wells, Oscillating gland for flowing oil	G. Fenton	143,280	Sept. 30, 1873	840	289	4	359
Wells, Reamer for enlarging oil	M. Gillespie	141,344	July 29, 1873	946	307	4	121
Well-parer	A. V. Vrooman	141,406	July 29, 1873	1005	326	4	125
Whalebone or rattan, Mechanism for splitting	J. Taggart	145,539	Dec. 16, 1873	463	151	4	647
Whalebone-splitting machine	D. Warner	145,770	Dec. 23, 1873	670	219	4	676
Wheat, Machine for separating cockle, &c., from	G. H. Rich	142,119	Aug. 26, 1873	670	220	4	216
Wheel:							
See Buffing-wheel.							
Car-wheel.							
Car-brake wheel.							
Carriage-wheel.							
Current-wheel.							
Emery-wheel.							
Fifth-wheel.							
Fly-wheel.							
Harvester-wheel.							
Measuring-wheel.							
Paddle-wheel.							
Pulley-wheel.							
Traction-wheel.							
Turbine-wheel.							
Vehicle-wheel.							
Water-wheel.							
Wheelbarrow-wheel.							
Wind-wheel.							
Wheel-quartering machine	W. Sellers	139,482	June 3, 1873	35	11	3	611
Wheel-turning machine	J. W. Hill	142,912	Sept. 16, 1873	523	178	4	307
Wheels, &c., Machine for dressing	J. W. Cole	139,774	June 10, 1873	317	98	3	650
Wheels, Machine for forming cutter for cutting teeth of	W. Sellers	136,101	Feb. 18, 1873	652	{ 213 } { 214 }	{ 3 } { 3 }	204
Wheels, &c., Machine for shaping or dressing	J. W. Cole	139,775	June 10, 1873	318	99	3	650

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Wheels to axles, Securing	R. J. Lessor and J. B. Shambo ..	141,570	Aug. 5, 1873	139	44	4	146
Wheelbarrow-wheel	W. E. Jacobs ..	143,511	Oct. 7, 1873	95	33	4	388
Wheelwright-machine	G. Sweet ..	140,094	June 17, 1873	601	189	3	681
Whiffletree	H. Agar ..	145,826	Dec. 23, 1873	713	234	4	679
Whiffletree	D. A. Johnson ..	140,276	June 24, 1873	774	244	3	703
Whiffletree	C. B. McClymond ..	134,758	Jan. 14, 1873	247	81	3	40
Whiffletree	J. Parker ..	144,786	Nov. 18, 1873	531	181	4	544
Whiffletree	D. S. Sloan ..	144,873	Nov. 25, 1873	620	211	4	562
Whiffletree	A. J. Sprague ..	140,170	June 24, 1873	686	215	3	695
Whiffletree	B. S. Wescott ..	140,327	June 24, 1873	821	261	3	707
Whiffletree-attachment to vehicles	A. Soursin ..	137,103	Mar. 25, 1873	685	227	3	330
Whiffletree-coupling	W. C. Shipherd ..	138,701	May 6, 1873	207	65	3	514
Whiffletree, Harness	C. T. Beecher ..	145,043	Dec. 2, 1873	1	1	4	586
Whiffletree-hook	M. Matson ..	141,721	Aug. 12, 1873	284	93	4	166
Whiffletree snap-hook	C. W. Saladee ..	138,699	May 6, 1873	205	65	3	514
Whiffletrees, &c., Draft-hook for	J. T. Dodson ..	138,619	May 6, 1873	131	43	3	508
Whip	F. P. Couse ..	143,065	Sept. 23, 1873	662	227	4	328
Whip-handle cap, Manufacture of	G. A. Burr ..	138,991	May 20, 1873	478	151	3	560
Whip-lash	H. J. Bush ..	137,341	Apr. 1, 1873	59	18	3	361
Whip-rack	J. M. Mitchell ..	138,676	May 6, 1873	187	59	3	512
Whip-socket	L. D. Benner ..	137,880	Apr. 15, 1873	549	172	3	426
Whip-socket	J. W. Coe and D. Merritt ..	136,417	Mar. 4, 1873	55	20	3	250
Whip-socket	J. W. H. Doubler ..	144,072	Oct. 28, 1873	646	213	4	461
Whip-socket	J. W. H. Doubler ..	144,073	Oct. 28, 1873	647	213	4	461
Whip-socket	J. Heberling ..	144,093	Oct. 28, 1873	663	218	4	463
Whip-socket	G. H. Jewett ..	136,732	Mar. 11, 1873	345	114	3	282
Whip-socket	C. Lang ..	142,346	Sept. 2, 1873	21	7	4	244
Whip-socket	F. B. Munroe ..	143,417	Oct. 7, 1873	21	8	4	382
Whip-socket	A. Searls ..	139,026	May 20, 1873	508	160	3	562
Whip-socket	J. H. Young ..	139,989	June 17, 1873	503	159	3	672
Whip-socket attachment	R. Dods ..	139,498	June 3, 1873	49	15	3	613
Whip-socket fastener	W. W. Richardson ..	141,952	Aug. 19, 1873	502	165	4	193
Whip-socket fastening	W. W. Richardson ..	141,953	Aug. 19, 1873	502	165	4	193
Whip-stock	L. Heywood ..	134,802	Jan. 24, 1873	286	93	3	43
Whistle, Steam	O. Kromer ..	141,280	July 29, 1873	881	289	4	116
Whistle, Steam	O. Kromer ..	142,166	Aug. 26, 1873	708	234	4	219
White-lead to collect the dust, Manufacture of	M. Tolle ..	142,419	Sept. 2, 1873	85	28	4	249
Wick-raiser	J. G. Hallas and W. N. Weeden ..	143,143	Sept. 23, 1873	718	247	4	333
Wick-raiser	J. Straszer ..	141,673	Aug. 12, 1873	247	78	4	163
Winding-machine guide	D. C. Hill ..	134,888	Jan. 14, 1873	362	115	3	49
Windlass	D. N. B. Coffin, jr.	134,517	Jan. 7, 1873	15	5	3	8
Windlass	W. H. Harfield ..	145,866	Dec. 23, 1873	749	244	4	682
Windlass	W. Newcomb ..	143,933	Oct. 28, 1873	578	192	4	456
Windlass	O. Reeder ..	135,099	Jan. 21, 1873	483	155	3	74
Windlass and capstan	D. N. B. Coffin, jr.	139,872	June 17, 1873	408	127 128	3	665
Windlass, Hoisting-machine	J. Rushworth ..	136,270	Feb. 25, 1873	816	263	3	229
Windlass, Ships'	G. H. Remington, B. D. Thayer, and J. P. Manton.	144,227	Nov. 4, 1873	52	16	4	482
Windmill	J. Q. and H. R. Adams ..	143,111	Sept. 23, 1873	696	239	4	331
Windmill	E. A. Atwood and H. H. Bodwell ..	142,885	Sept. 16, 1873	500	171	4	305
Windmill	H. H. Bodwell and E. A. Atwood ..	142,198	Aug. 26, 1873	735	242	4	221
Windmill	A. T. Boon ..	142,324	Sept. 2, 1873	3	1	4	242
Windmill	G. A. Carter ..	142,436	Sept. 2, 1873	99	33	4	250
Windmill	M. T. and M. C. Chapman ..	145,335	Dec. 9, 1873	271	91	4	619
Windmill	E. Crump ..	146,049	Dec. 30, 1873	934	301	4	707
Windmill	J. P. Davie and A. Morgan ..	145,158	Dec. 2, 1873	110	36	4	594
Windmill	J. Hoag ..	143,076	Sept. 23, 1873	669	230	4	329
Windmill	T. R. and A. C. Jackson ..	139,007	May 20, 1873	495	156	3	561
Windmill	W. Jones ..	142,108	Aug. 26, 1873	661	217	4	215
Windmill	M. J. Kauffman ..	142,479	Sept. 2, 1873	140	46	4	253
Windmill	J. Keeler and C. C. Harris ..	145,877	Dec. 23, 1873	758	248	4	683
Windmill	O. B. Knapp ..	142,400	Sept. 2, 1873	71	23	4	248
Windmill	O. B. Knapp ..	142,636	Sept. 9, 1873	282	93	4	277
Windmill	C. P. Long and C. N. McEvers ..	137,012	Mar. 18, 1873	593	197	3	311
Windmill	G. Mabie ..	140,514	July 1, 1873	146	50	4	20
Windmill	W. H. Marsh and O. E. Miles ..	140,931	July 15, 1873	529	177	4	70
Windmill	W. C. Nelson ..	142,266	Aug. 26, 1873	791	261	4	226
Windmill	W. D. Nichols ..	137,793	Apr. 15, 1873	477	150	3	420
Windmill	W. D. Nichols ..	139,473	June 3, 1873	27	8	3	611
Windmill	J. B. Park ..	137,565	Apr. 8, 1873	266	82	3	390
Windmill	W. Peck ..	138,186	Apr. 22, 1873	837	265	3	458
Windmill	S. H. Radway ..	144,137	Oct. 28, 1873	698	231	4	465
Windmill	E. Sanderson ..	145,970	Dec. 30, 1873	867	281	4	702
Windmill	S. Shannon ..	140,222	June 24, 1873	728	229	3	699
Windmill	G. Shaver ..	135,669	Feb. 11, 1873	267	84	3	160
Windmill	E. S. Smith ..	137,729	Apr. 8, 1873	412	127	3	402
Windmill	G. Stearns ..	143,308	Sept. 30, 1873	865	296	4	361
Windmill	J. F. Stewart ..	140,854	July 15, 1873	455	154	4	65
Windmill	S. F. Stowe ..	141,827	Aug. 12, 1873	381	125	4	174
Windmill	G. A. Swartz ..	137,111	Mar. 25, 1873	692	230	3	330
Windmill	C. A. Taylor ..	141,094	July 22, 1873	692	232	4	93
Windmill	J. A. Wheeler ..	145,541	Dec. 16, 1873	464	152	4	647
Windmill-regulator	D. C. Stover ..	145,765	Dec. 23, 1873	666	217	4	675
Wind-wheel	P. Brand, J. Barrows, and A. Armstrong.	145,782	Dec. 23, 1873	679	222	4	677
Wind-wheel	D. Halladay ..	138,648	May 6, 1873	157	51	3	510
Wind-wheel	C. W. Kline ..	145,214	Dec. 2, 1873	157	54	4	598
Wind-wheel	G. Metcalf ..	142,256	Aug. 26, 1873	783	258	4	225
Wind-wheel	A. Raymond ..	139,189	May 20, 1873	664	208	3	574
Wind-wheel	N. and D. Sheplar ..	143,100	Sept. 23, 1873	687	236	4	330
Wind-wheel power	I. Straub ..	138,593	May 6, 1873	110	36	3	507
Window	G. M. Barth ..	144,430	Nov. 11, 1873	229	76	4	508
Window	S. Darling ..	138,009	Apr. 22, 1873	676	214	3	446
Window	J. Perkins ..	138,579	May 6, 1873	100	32	3	506

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Window-fastener	W. A. Hawthorn and E. E. Scott.	141, 505	Aug. 5, 1873	85	26	4	142
Window-fastening, Storm	A. J. Lovejoy	144, 684	Nov. 18, 1873	448	152	4	537
Window frame and sash	J. McNamee	137, 943	Apr. 15, 1873	603	190	3	430
Window-guard	J. W. White	145, 773	Dec. 23, 1873	673	219	4	676
Window, Implement for washing	T. J. Mayall	141, 368	July 29, 1873	968	315	4	122
Window-platform, Portable	G. H. Peabody	137, 714	Apr. 8, 1873	400	123	3	401
Window-screen	W. G. Anderson	145, 547	Dec. 16, 1873	470	153	4	647
Window-screen	J. W. Boughton	140, 674	July 8, 1873	297	99	4	44
Window-screen	L. W. Fifield	136, 826	Mar. 18, 1873	437	145	3	299
Window-screen	W. H. Fletcher	139, 138	May 20, 1873	614	192	3	571
Window-screen	C. W. Fowler	135, 901	Feb. 18, 1873	484	156	3	191
Window-screen	D. C. Kellam	139, 794	June 10, 1873	333	103	3	651
Window-screen	S. T. Lippincott	136, 740	Mar. 11, 1873	352	116	3	283
Window-screen	J. F. Scherpe	142, 735	Sept. 9, 1873	367	124	4	283
Window-screen	J. A. Thompson	140, 967	July 15, 1873	566	189	4	73
Window-shade	E. E. Johnson	135, 713	Feb. 11, 1873	306	97	3	164
Window-ventilator	L. Robinson	144, 413	Nov. 11, 1873	211	71	4	507
Window weather-proof, Making	B. Smith	137, 572	Apr. 8, 1873	274	84	3	390
Wine-cooler	F. M. Piper	139, 915	June 17, 1873	449	139	3	668
Wine-cooler	J. R. Whipple	136, 632	Mar. 11, 1873	264	89	3	275
Wine, Manufacture of	J. C. Baxter	139, 757	June 10, 1873	301	93	3	649
Wine-press	E. Howland	144, 456	Nov. 11, 1873	246	83	4	510
Wines, Manufacture of imitation medicated	V. Brosseau	145, 928	Dec. 30, 1873	827		4	699
Winnower, Reciprocating	H. Keller	140, 201	June 24, 1873	712	224	3	698
Winnower, Reciprocating	E. Lombard	144, 116	Oct. 28, 1873	681	225	4	464
Winnower, Reciprocating	H. C. Wirtz and C. Gebhardt, jr.	145, 077	Dec. 2, 1873	35	11	4	588
Winnower, Rotary	J. H. Adamson	145, 980	Dec. 30, 1873	874	283	4	702
Wire	G. D. Dudley	145, 285	Dec. 9, 1873	227	77	4	616
Wire and rope stretching tool	R. L. Taylor	138, 298	Apr. 29, 1873	966	303	3	477
Wire-cloth, Apparatus for drying painted	C. H. Waters	138, 060	Apr. 22, 1873	728	230	3	450
Wire-cloth painting-machine	J. H. De Witt	143, 227	Sept. 30, 1873	795	274	4	355
Wire-fabric	W. C. Edge	142, 450	Sept. 2, 1873	115	36	4	251
Wire-fabric, Woven	J. W. C. Peters	140, 160	June 24, 1873	678	213	3	695
Wire, Flier for covering bonnet	E. H. Tyler	140, 322	June 24, 1873	817	259	3	707
Wire-gage	H. Smith	140, 554	July 1, 1873	181	61	4	23
Wire-loops, Machine for forming	C. M. Spencer	145, 259	Dec. 2, 1873	190	65, 66	4	600
Wire, Machine for drawing	J. and E. Woods	144, 940	Nov. 25, 1873	670	227	4	567
Wire, Machine for pointing	F. H. Aiken	143, 486	Oct. 7, 1873	75	25	4	387
Wire, Nipper for twisting	J. W. Fry	145, 794	Dec. 23, 1873	688	226	4	677
Wire-pointing machine	F. H. Aiken	141, 977	Aug. 18, 1873	519	172	4	194
Wire, Rolling	W. Walton and J. T. Fallows	138, 966	May 13, 1873	445	140	3	544
Wire stand or holder	G. D. Dudley	145, 283	Dec. 9, 1873	226	76	4	616
Wire-stretcher	I. H. Congdon and J. E. House	146, 046	Dec. 30, 1873	931	300	4	707
Wire turning and cutting machine	C. M. Spencer	137, 630	Apr. 8, 1873	319	100	3	394
Wire-way	J. H. and J. W. Rogers	140, 167	June 24, 1873	684	214	3	695
Wire-way, Elevated	C. E. W. Bunster	141, 757	Aug. 12, 1873	316	103	4	169
Wire-way, Elevated	H. T. Lantis and N. Davis	142, 857	Sept. 16, 1873	479	163	4	303
Wire-way, Saddle for	T. M. Martin	143, 087	Sept. 23, 1873	677	233	4	329
Wood and iron, Composition for coating	E. F. Prentiss	142, 117	Aug. 26, 1873	668		4	216
Wood, Bundling kindling	C. B. Whittemore	142, 309	Aug. 26, 1873	824	273	4	229
Wood, Composition for filling the grain of	W. Harding	139, 670	June 10, 1873	212		3	642
Wood, Compound for filling	C. E. Bradley	144, 948	Nov. 25, 1873	678		4	567
Wood, Compound for filling	J. B. Dittenhaver	142, 446	Sept. 2, 1873	112		4	251
Wood, Compound for painting and coating	H. F. Snow and J. H. Davis	143, 472	Oct. 7, 1873	61		4	386
Wood-compressor	H. A. House	143, 243	Sept. 30, 1873	809	278	4	356
Wood cutter, Kindling	N. Sonnichsen	140, 225	June 24, 1873	730	230	3	699
Wood-fillings and paint-compounds	J. Miller	138, 914	May 13, 1873	404		3	541
Wood-graining apparatus	C. Falke	143, 444	Oct. 7, 1873	41	14	4	384
Wood, Graining or imitating	J. Johnston	135, 039	Jan. 21, 1873	511		3	76
Wood-grinder	J. Bridge	144, 313	Nov. 4, 1873	115	39	4	488
Wood-grinder	J. F. Daniels and J. H. Hubbard	141, 206	July 29, 1873	810	265	4	110
Wood-joining	R. McChesney	144, 626	Nov. 18, 1873	399	{ 133 } { 134 }	4	533
Wood-molding	L. Bushnell	144, 438	Nov. 11, 1873	234	78	4	509
Wood-preserving apparatus	H. G. McGonegal	140, 520	July 1, 1873	152	52	4	21
Wood, Process of softening and toughening blocks of	G. W. Swan	142, 298	Aug. 26, 1873	817		4	228
Wood-splitting machine	D. Milliken	143, 455	Oct. 7, 1873	49	17	4	385
Wood-splitting machine	R. Murray	142, 116	Aug. 26, 1873	667	220	4	216
Wood to imitate slate, Coloring and preserving	J. O. Froshaug	145, 859	Dec. 23, 1873	743		4	682
Wood, &c., to render it acid-proof, Compound for coating	R. Newell	140, 530	July 1, 1873	161		4	21
Wooden pin, Machine for making	E. C. Johnson	138, 658	May 6, 1873	168	54	3	511
Wool, &c., Apparatus for cleansing dyed	J. E. Ackroyd	143, 603	Oct. 14, 1873	191	64	4	404
Wool-burring	T. Crossley	141, 038	July 22, 1873	642		4	89
Wool on pelts, Cleaning	J. M. Brown	141, 423	Aug. 5, 1873	12		4	136
Wool-pulling machinery	J. Wattean	141, 972	Aug. 19, 1873	515	{ 170 } { 171 }	4	194
Work-bench, Joiners'	H. White	140, 394	July 1, 1873	49	17	4	12
Work-box	W. Brace	138, 372	Apr. 29, 1873	1, 026	323	3	482
Work-box	E. Heath	138, 886	May 13, 1873	383	120	3	539
Work-box	E. Hinckley	142, 786	Sept. 16, 1873	424	143	4	298
Work-box	H. E. Wilcox	141, 409	July 29, 1873	1, 007	327	4	125
Work-holder	R. W. Perkins	138, 691	May 6, 1873	198	62	3	513
Work-holding device	F. E. Hahn	146, 064	Dec. 30, 1873	946	305	4	708
Work-stand	C. S. Caple	138, 072	Apr. 22, 1873	738	234	3	451
Work-table, Attachment for ladies'	J. P. Wilson	143, 212	Sept. 23, 1873	776	267	4	338
Worm destroyer, Cotton	J. Helm	139, 062	May 20, 1873	542	171	3	565
Worm destroyer, Cotton	J. W. Johnson	145, 571	Dec. 16, 1873	487	160	4	649
Worm destroyer, Cotton	J. W. Johnson	145, 572	Dec. 16, 1873	487	160	4	649
Woven fabrics, Machinery for beetling	J. Patterson	141, 725	Aug. 12, 1873	287	94	4	166
Wrecking-apparatus	B. McGroder and H. Tiedemann	142, 712	Sept. 9, 1873	346	{ 116 } { 117 }	4	282
Wrecking-apparatus	M. Osborn	144, 125	Oct. 28, 1873	688	228	4	465
Wrench:							
See Hose-wrench.							
Pipe-wrench.							

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Wrench.....	S. Barry and F. Perkins.....	138,468	May 6, 1873	4	1	3	498
Wrench.....	W. C. Bemis.....	145,085	Dec. 2, 1873	44	14	4	589
Wrench.....	B. C. Bradley.....	140,111	June 24, 1873	636	200	3	691
Wrench.....	M. Bubser.....	141,259	July 29, 1873	863	282	4	114
Wrench.....	T. L. Buckley.....	144,826	Nov. 25, 1873	577	197	4	558
Wrench.....	E. A. Cooper.....	135,084	Jan. 21, 1873	544	177	3	79
Wrench.....	M. G. Crane.....	141,767	Aug. 12, 1873	325	106	4	169
Wrench.....	W. J. Innis.....	142,570	Sept. 9, 1873	231	75	4	272
Wrench.....	W. Johnson.....	141,794	Aug. 12, 1873	355	117	4	172
Wrench.....	J. Lee.....	145,953	Dec. 30, 1873	851	277	4	701
Wrench.....	P. E. McIntosh.....	137,310	Apr. 1, 1873	29	9	3	359
Wrench.....	A. D. McMaster.....	143,367	Sept. 30, 1873	922	313	4	365
Wrench.....	A. Partridge.....	141,289	July 29, 1873	887	291	4	116
Wrench.....	N. L. Post.....	135,842	Feb. 11, 1873	421	137	3	172
Wrench.....	L. B. Prindle.....	144,134	Oct. 28, 1873	695	230	4	465
Wrench.....	H. F. Read.....	138,932	May 13, 1873	418	131	3	542
Wrench.....	E. S. Scripture.....	144,036	Oct. 28, 1873	614	203	4	458
Wrench.....	J. Smiley.....	135,856	Feb. 11, 1873	431	140	3	173
Wrench.....	T. J. Smith and J. Lee.....	139,622	June 3, 1873	153	51	3	621
Wrench.....	S. W. Wakefield.....	141,477	Aug. 5, 1873	61	19	4	140
Wrench.....	J. B. Weeden.....	136,797	Mar. 11, 1873	399	132	3	286
Wrench.....	S. J. Wright.....	145,710	Dec. 16, 1873	607	198	4	658
Wrench and bolt cutter.....	P. Broadbooks.....	136,964	Mar. 18, 1873	550	182	3	308
Wrench and grappling-tool, Combined.....	S. B. Dexter.....	137,429	Mar. 25, 1873	707	235	3	332
Wrench-bars, Die for forging.....	L. Coes.....	144,832	Nov. 25, 1873	583	199	4	559
Wrench-head die.....	L. Chapman.....	135,406	Feb. 4, 1873	13	4	3	129
Wrench-heads, Die for forming.....	L. Chapman.....	137,052	Mar. 25, 1873	638	211	3	326
Wrench-heads, Die for forming.....	L. Chapman.....	137,053	Mar. 25, 1873	638	211	3	326
Wrench-heads, Manufacture of.....	L. Coes.....	142,771	Sept. 16, 1873	410	138	4	297
Wringer: See Clothes-wringer. Mop-wringer.							
Y.							
Yarn-beam, Friction-mechanism for.....	H. Chilson.....	139,236	May 27, 1873	719	226	3	587
Yarn, Machine for sizing.....	T. Abbott.....	134,964	Jan. 21, 1873	439	141	3	71
Yeast-powder, Manufacture of crystalline acid phosphate of lime for.....	J. E. Lauer.....	140,051	June 17, 1873	562	.....	3	678
Yoke bow-pin, Ox.....	W. J. Ives.....	145,422	Dec. 9, 1873	345	115	4	625
Yoke, Combined bow-fastener and guard for ox.....	E. N. Bacon.....	145,381	Dec. 9, 1873	306	103	4	622
Yoke holder, Neck.....	G. R. Huntley.....	142,852	Sept. 16, 1873	475	162	4	303
Yoke, Neck.....	P. Epler.....	139,380	May 27, 1873	839	268	3	597
Yucca, Extract of.....	L. G. Fellner.....	134,876	Jan. 14, 1873	352	.....	3	48
Z.							
Zinc, Apparatus for condensing and collecting white.....	J. G. Trotter.....	145,976	Dec. 30, 1873	871	282	4	702
Zinc-furnace.....	E. H. and F. G. Richter.....	145,450	Dec. 9, 1873	365	122	4	627
Zinc, Furnace for the manufacture of oxide of.....	J. G. Lang.....	142,571	Sept. 9, 1873	231	75	4	272
Zinc-granulating apparatus.....	E. H. Richter.....	145,449	Dec. 9, 1873	365	121	4	627
Zinc-white, Manufacture of.....	N. Bartlett.....	139,701	June 10, 1873	249	78	3	645

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Advertising-frame.....	M. M. Burnham and J. B. Oaks.....	6,746	July 8, 1873	4	36
Advertising-frame.....	C. H. Shackford and M. V. Campbell.....	6,955	Oct. 7, 1873	4	381
Aquarium-frame.....	G. E. Smith.....	6,887	Sept. 16, 1873	4	296
Arbor, Grape.....	C. H. Crump.....	6,962	Oct. 21, 1873	4	425
B.					
Badge.....	H. A. Oesterle.....	6,589	Apr. 15, 1873	3	417
Badge.....	J. Seymour.....	7,046	Dec. 9, 1873	4	615
Barbers' and dentists chair.....	R. W. and G. W. Archer.....	6,648	May 13, 1873	3	527
Barbers' and dentists chair, Foot-rest for.....	R. W. and G. W. Archer.....	6,647	May 13, 1873	3	527
Barber's chair, Foot-stool for.....	F. J. Coates.....	6,725	June 24, 1873	3	691
Basket.....	S. I. Russell.....	6,508	Mar. 18, 1873	3	297
Basket, Cake.....	G. Gill.....	6,379-6,380	Feb. 4, 1873	3	127
Bell, Call.....	C. S. and E. A. Barnard.....	6,895	Sept. 30, 1873	4	354
Bell, Hand.....	E. S. Cone.....	6,780	July 22, 1873	4	85
Bell-pull.....	J. B. Whitney.....	6,557	Apr. 1, 1873	3	357
Bells, Ornamenting.....	O. F. Fogelstrand.....	6,493	Mar. 18, 1873	3	297
Beer-mug.....	J. E. Miller.....	6,506	Mar. 18, 1873	3	297
Beer-mug.....	J. Oesterling.....	6,383	Feb. 4, 1873	3	127
Billard-table.....	N. Stoll.....	6,550	Apr. 1, 1873	3	357
Boa.....	G. H. Prindle.....	6,793-6,794	Aug. 5, 1873	4	135
Bolt-threading machine, Frame of.....	S. W. Putnam, jr.....	6,764	July 8, 1873	4	36
Boot-jack.....	O. F. Fogelstrand.....	6,896	Sept. 30, 1873	7	354
Boot-jack.....	E. J. Steele.....	6,535	Mar. 25, 1873	3	325
Boot, Rubber.....	L. L. Hyatt.....	6,957	Oct. 14, 1873	4	401
Bottle.....	H. Sawyer.....	6,489	Mar. 4, 1873	3	245
Bottle.....	N. Sleeper.....	6,985	Nov. 4, 1873	4	478
Bottle, Glass.....	J. W. Philbrook.....	6,983	Nov. 4, 1873	4	478
Bottle-stand, Revolving.....	T. P. Spencer.....	6,582	Apr. 8, 1873	3	387
Bracket.....	O. F. Fogelstrand.....	6,973	Nov. 4, 1873	4	478
Bracket.....	A. D. Judd.....	6,686	May 27, 1873	3	586
Bread-plate.....	H. S. McKee.....	6,636	May 6, 1873	3	497
Breast-pin, &c.....	G. W. Loomis and A. T. Goodell.....	6,964	Oct. 21, 1873	4	425
Buckle.....	J. R. Smith.....	7,005	Dec. 2, 1873	4	585
Buckle, Belt.....	J. E. Smith.....	6,873	Sept. 2, 1873	4	242
Burial-case.....	B. F. Heimbach.....	6,772	July 15, 1873	4	57
Burial-casket.....	B. F. Heimbach.....	6,771	July 15, 1873	4	57
Burner, Gas.....	E. R. Beach.....	6,971	Nov. 4, 1873	4	478
Button for wearing apparel.....	J. E. Wheeler.....	6,947	Oct. 7, 1873	4	380
C.					
Cake-holder.....	G. Gill.....	6,799	Aug. 12, 1873	4	159
Can.....	H. G. Shook.....	6,872	Sept. 2, 1873	4	242
Canister for tea, coffee, &c.....	S. A. Ilsley.....	7,069-7,070	Dec. 23, 1873	4	671
Cape.....	M. Landenberger, jr.....	6,629-6,635	May 6, 1873	3	497
Cape.....	M. Landenberger, jr.....	6,641-6,643	May 6, 1873	3	497
Cape.....	M. Landenberger, jr.....	6,660	May 20, 1873	3	559
Cape.....	M. Landenberger, jr.....	6,681	May 27, 1873	3	586
Cape.....	M. Landenberger.....	6,702	June 10, 1873	3	640
Cape.....	M. Landenberger.....	6,869	Sept. 2, 1873	4	241
Card-receiver.....	G. Gill.....	6,378	Feb. 4, 1873	3	127
Carpet.....	J. B. Alden.....	6,970	Nov. 4, 1873	4	478
Carpet.....	J. H. Bromley.....	6,386	Feb. 11, 1873	3	156
Carpet.....	R. R. Campbell.....	6,460-6,472	Mar. 4, 1873	3	245
Carpet.....	R. R. Campbell.....	6,558-6,560	Apr. 8, 1873	3	386
Carpet.....	R. R. Campbell.....	6,747-6,752	July 8, 1873	4	36
Carpet.....	R. R. Campbell.....	6,900-6,908	Oct. 7, 1873	4	379 380
Carpet.....	R. Charlton.....	6,561	Apr. 8, 1873	3	386
Carpet.....	J. M. Christie.....	6,473-6,479	Mar. 4, 1873	3	245
Carpet.....	J. M. Christie.....	6,562-6,571	Apr. 8, 1873	3	386 387
Carpet.....	J. M. Christie.....	6,753-6,756	July 8, 1873	4	36
Carpet.....	A. Cowell.....	6,512	Mar. 25, 1873	3	325
Carpet.....	B. Crabtree, jr.....	6,352-6,353	Jan. 21, 1873	3	70
Carpet.....	J. Crabtree.....	6,865-6,866	Sept. 2, 1873	4	241
Carpet.....	J. Dornan.....	6,354	Jan. 21, 1873	3	70
Carpet.....	J. Dornan.....	6,811	Aug. 19, 1873	4	185
Carpet.....	J. Fisher.....	6,412-6,415	Feb. 18, 1873	3	189
Carpet.....	J. Fisher.....	6,594	Apr. 22, 1873	3	444
Carpet.....	J. Fisher.....	6,705-6,708	June 17, 1873	3	663
Carpet.....	J. Fisher.....	7,050	Dec. 16, 1873	4	641
Carpet.....	W. Gilmour.....	6,336	Jan. 7, 1873	3	7
Carpet.....	H. F. Goetze.....	6,480-6,481	Mar. 4, 1873	3	245
Carpet.....	H. F. Goetze.....	6,758	July 8, 1873	4	36
Carpet.....	H. F. Goetze.....	6,950	Oct. 7, 1873	4	380
Carpet.....	J. Hamer.....	6,482	Mar. 4, 1873	3	245
Carpet.....	J. Hamer.....	6,575-6,576	Apr. 8, 1873	3	387
Carpet.....	A. Heald.....	6,355-6,356	Jan. 21, 1873	3	70
Carpet.....	A. Heald.....	6,588	Apr. 15, 1873	3	417
Carpet.....	A. Heald.....	6,653-6,654	May 20, 1873	3	558
Carpet.....	A. Heald.....	6,713-6,720	June 24, 1873	3	691
Carpet.....	O. Heinigke.....	6,416-6,424	Feb. 18, 1873	3	189
Carpet.....	O. Heinigke.....	6,513-6,517	Mar. 25, 1873	3	325

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Carpet.....	O. Heinigke.....	6, 909-6, 931	Oct. 7, 1873	4	380
Carpet.....	O. Heinigke.....	7, 051-7, 059	Dec. 16, 1873	4	641
Carpet.....	W. J. Hogg.....	6, 357	Jan. 21, 1873	3	70
Carpet.....	H. Horan.....	6, 425-6, 428	Feb. 18, 1873	3	189
Carpet.....	H. Horan.....	6, 518-6, 520	Mar. 25, 1873	3	325
Carpet.....	H. Horan.....	6, 596-6, 602	Apr. 22, 1873	3	444
Carpet.....	H. Horan.....	6, 932	Oct. 7, 1873	4	380
Carpet.....	H. Horan.....	7, 025-7, 033	Dec. 9, 1873	4	614
Carpet.....	H. Horan.....	7, 060-7, 061	Dec. 16, 1873	4	641
Carpet.....	R. Hoskin.....	6, 521	Mar. 25, 1873	3	325
Carpet.....	J. Humphries.....	6, 522	Mar. 25, 1873	3	325
Carpet.....	H. S. Kerr.....	6, 358	Jan. 21, 1873	3	70
Carpet.....	H. S. Kerr.....	6, 687-6, 688	May 27, 1873	3	586
Carpet.....	H. Knight.....	7, 034	Dec. 9, 1873	4	614
Carpet.....	C. S. Lilley.....	6, 484-6, 485	Mar. 4, 1873	3	245
Carpet.....	L. G. Malkin.....	6, 429-6, 430	Feb. 18, 1873	3	189
Carpet.....	L. G. Malkin.....	6, 524-6, 525	Mar. 25, 1873	3	325
Carpet.....	L. G. Malkin.....	6, 604-6, 605	Apr. 22, 1873	3	444
Carpet.....	L. G. Malkin.....	6, 934	Oct. 7, 1873	4	380
Carpet.....	D. McNair.....	6, 486	Mar. 4, 1873	3	245
Carpet.....	D. McNair.....	6, 936-6, 937	Oct. 7, 1873	4	380
Carpet.....	E. J. Ney.....	6, 437-6, 448	Feb. 18, 1873	3	189
Carpet.....	E. J. Ney.....	6, 529-6, 532	Mar. 25, 1873	3	325
Carpet.....	E. J. Ney.....	6, 606-6, 607	Apr. 22, 1873	3	444
Carpet.....	E. J. Ney.....	6, 938-6, 941	Oct. 7, 1873	4	380
Carpet.....	E. J. Ney.....	7, 038-7, 043	Oct. 9, 1873	4	614
Carpet.....	H. Nordmann.....	6, 449-6, 450	Feb. 18, 1873	3	189
Carpet.....	H. Nordmann.....	6, 533	Mar. 25, 1873	3	325
Carpet.....	H. Nordmann.....	6, 608	Apr. 22, 1873	3	444
Carpet.....	H. Nordmann.....	7, 044-7, 045	Dec. 9, 1873	4	615
Carpet.....	J. Powell.....	6, 337	Jan. 7, 1873	3	7
Carpet.....	J. Powell.....	6, 360	Jan. 21, 1873	3	71
Carpet.....	J. Powell.....	6, 590-6, 591	Apr. 15, 1873	3	417
Carpet.....	J. Powell.....	6, 784	July 22, 1873	4	85
Carpet.....	C. Righter.....	6, 361	Jan. 21, 1873	3	71
Carpet.....	C. A. Righter.....	6, 578-6, 579	Apr. 8, 1873	3	387
Carpet.....	C. A. Righter.....	6, 655	May 20, 1873	3	559
Carpet.....	C. A. Righter.....	6, 819-6, 823	Aug. 19, 1873	4	185
Carpet.....	C. A. Righter.....	6, 984	Nov. 4, 1873	4	478
Carpet.....	J. H. Smith.....	6, 452-6, 454	Feb. 18, 1873	3	189
Carpet.....	J. H. Smith.....	6, 534	Mar. 25, 1873	3	325
Carpet.....	J. H. Smith.....	6, 610-6, 612	Apr. 22, 1873	3	445
Carpet.....	J. H. Smith.....	6, 942-6, 945	Oct. 7, 1873	4	380
Carpet.....	J. H. Smith.....	7, 065-7, 066	Dec. 16, 1873	4	641
Carpet.....	H. Smith.....	6, 790	July 29, 1873	4	108
Carpet.....	H. Smith.....	6, 888	Sept. 16, 1873	4	296
Carpet.....	T. J. Stearns.....	6, 487	Mar. 4, 1873	3	245
Carpet.....	A. Webster, jr.....	6, 339	Jan. 7, 1873	3	7
Carpet.....	A. T. Webster.....	6, 796-6, 797	Aug. 5, 1873	4	135
Carpet.....	J. T. Webster.....	6, 551-6, 554	Apr. 1, 1873	3	357
Carpet.....	J. T. Webster.....	6, 738-6, 740	July 1, 1873	4	7, 8
Carpet.....	J. T. Webster.....	6, 824	Aug. 19, 1873	4	185
Carriage-pole trimming.....	A. Searls.....	6, 581	Apr. 8, 1873	3	387
Carriages, Back cross-strap mountings for.....	A. Searls.....	6, 593	Apr. 15, 1873	3	417
Casket-handle socket.....	C. B. Rogers.....	6, 639-6, 640	May 6, 1873	3	497
Casket-handle tip.....	G. W. Bunnell.....	6, 779	July 22, 1873	4	85
Caster, Handle of table.....	H. C. Wilcox.....	7, 067	Dec. 16, 1873	4	641
Ceilings, Center-piece for.....	B. Dreyer.....	6, 711-6, 712	June 24, 1873	3	691
Center-piece.....	S. Kellet.....	6, 381	Feb. 4, 1873	3	127
Chain-link, Ornamental.....	V. Draper.....	6, 781-6, 783	July 22, 1873	4	85
Chair.....	G. M. Harwood.....	6, 875	Sept. 9, 1873	4	270
Chair.....	S. Hayward.....	6, 828	Aug. 26, 1873	4	212
Chair.....	J. M. Waters.....	6, 894	Sept. 23, 1873	4	322
Chair-frame.....	B. J. Harrison.....	6, 658	May 20, 1873	3	559
Chair-frame.....	E. Seymour and C. E. Shattuck.....	6, 458	Feb. 25, 1873	3	218
Chair-frame.....	J. H. Travis.....	6, 834	Sept. 2, 1873	4	241
Clock-case.....	G. H. Blakesley.....	7, 015	Dec. 2, 1873	4	585
Clock-case.....	J. F. and H. Mann.....	6, 800	Aug. 12, 1873	4	159
Clock-front.....	E. Ingraham.....	6, 628	May 6, 1873	3	497
Clock-pendulum.....	H. J. Davies.....	6, 963	Oct. 21, 1873	4	425
Coffin-handle.....	N. Hayden.....	6, 595	Apr. 22, 1873	3	444
Coffin-handle socket.....	J. S. Ray.....	6, 584	Apr. 8, 1873	3	387
Coffin-handle socket.....	J. S. Ray.....	6, 592	Apr. 15, 1873	3	417
Coffin-handle socket.....	J. S. Ray.....	6, 734	June 24, 1873	3	691
Collar-box.....	R. W. Betts.....	6, 791	Aug. 5, 1873	4	135
Collarette.....	A. S. Ellison.....	6, 988	Nov. 11, 1873	4	504
Cutlery, Handle for table.....	J. D. Frary.....	7, 078	Dec. 30, 1873	4	698
Cutlery, Table.....	J. D. Frary.....	6, 757	July 8, 1873	4	36
D.					
Dish, Glass.....	J. H. Hobbs.....	6, 805	Aug. 19, 1873	4	185
Dishes and nappies, Glass.....	J. H. Hobbs.....	6, 587	Apr. 15, 1873	3	417
Door-bolt plate.....	G. W. White.....	6, 624	Apr. 29, 1873	3	471
Drawer-pull.....	O. T. Fogelstrand.....	6, 775	July 15, 1873	4	58
Drawer-pull.....	A. Shepard.....	7, 075	Dec. 23, 1873	5	671
Drawer-pull.....	L. Widmayer.....	6, 724	June 24, 1873	3	691
F.					
Fabric.....	C. H. Landenberger.....	6, 833	Sept. 2, 1873	4	241
Fabric, Striped.....	C. H. Landenberger.....	6, 695	June 3, 1873	3	608
Fan.....	J. T. Brundage.....	6, 774	July 15, 1873	4	58
Fan.....	W. A. Smith.....	7, 017	Dec. 2, 1873	4	585
Fence.....	J. I. Healey.....	6, 411	Feb. 11, 1873	3	157
Fence and gate, Cemetery.....	J. Sharkey.....	6, 765	July 8, 1873	4	36

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Figures.....	J. D. Smith.....	7, 079	Dec. 30, 1873	4	698
File, Paper.....	E. J. Steele.....	6, 583	Apr. 8, 1873	3	387
Floor-cloth.....	J. Barrett.....	6, 682-6, 683	May 27, 1873	3	586
Floor-cloth.....	C. T. and V. E. Meyer.....	6, 656-6, 657	May 20, 1873	3	559
Floor-cloth.....	C. T. and V. E. Meyer.....	6, 661-6, 662	May 20, 1873	3	559
Floor-cloth.....	C. T. and V. E. Meyer.....	6, 663	May 20, 1873	3	585
Floor-cloth.....	J. Meyer.....	6, 691	May 27, 1873	3	586
Flower-stand.....	J. E. Morris.....	6, 743	July 1, 1873	4	8
Fly-trap.....	D. K. Thompson.....	6, 968	Oct. 28, 1873	4	452
Fly-wheel.....	J. G. Baker.....	7, 024	Dec. 9, 1873	4	614
Font, Baptismal.....	A. E. Van Wert.....	6, 459	Feb. 25, 1873	3	218
Fork and spoon handle.....	M. H. Mosman.....	6, 577	Apr. 8, 1873	3	387
Fountain-basin.....	J. Moore and W. H. Wilkinson.....	6, 644	May 6, 1873	3	497
Fruit-jar.....	S. B. Rowley.....	6, 886	Sept. 16, 1873	4	296
Fur-collar, Lady's.....	M. Gross and B. B. Zippert.....	6, 827	Aug. 26, 1873	4	212
Fur-trimming.....	A. Molnar.....	7, 064	Dec. 16, 1873	4	641
Furniture.....	T. W. and F. M. Moore.....	6, 722	June 24, 1873	3	691
Furniture, Parlor.....	D. Shales and N. McCully.....	6, 891	Sept. 23, 1873	4	322
G.					
Gas-bracket.....	J. F. Travis.....	6, 809	Aug. 19, 1873	4	185
Gasalier.....	J. F. Travis.....	6, 808	Aug. 19, 1873	4	185
Glass, &c., Drinking.....	T. G. Cook.....	6, 987	Nov. 11, 1873	4	504
Glass-ware.....	T. B. Atterbury.....	6, 613	Apr. 29, 1873	3	471
Goblet, &c.....	J. Hobbs.....	6, 975-6, 976	Nov. 4, 1873	4	478
Goblet, Glass.....	J. H. Hobbs.....	6, 804	Aug. 19, 1873	4	185
Governor-base.....	W. B. Le Van.....	6, 374	Jan. 28, 1873	3	100
Grinding-mill frame or stand.....	J. G. and W. J. Lane.....	7, 022	Dec. 9, 1873	4	614
H.					
Hames-top.....	H. Beagle, jr.....	6, 617	Apr. 29, 1873	3	471
Harness-trimming.....	R. Hoyer.....	7, 071	Dec. 23, 1873	4	671
Hat.....	J. S. Fayerweather.....	6, 952	Oct. 7, 1873	4	380
Hat and coat hook.....	A. D. Judd.....	6, 694	June 3, 1873	3	608
Hinge.....	J. B. Whitney.....	6, 362	Jan. 21, 1873	3	71
Hinge, Butt.....	M. Bradley.....	6, 949	Oct. 7, 1873	4	380
Hinge, Butt.....	W. Gorman.....	7, 018	Dec. 9, 1873	4	614
Hot-air register.....	E. A. Tuttle.....	6, 620-6, 622	Apr. 29, 1873	3	471
Hot-air register.....	E. A. Tuttle.....	6, 645-6, 646	May 6, 1873	3	497
Hub, Carriage-wheel.....	J. R. Locke.....	6, 997	Nov. 18, 1873	4	531
I.					
Inkstand.....	B. Brower.....	6, 878-6, 879	Sept. 9, 1873	4	270
Inkstand.....	G. W. McGill.....	7, 003	Nov. 25, 1873	4	558
Inkstand.....	W. F. Muller.....	6, 528	Mar. 25, 1873	3	325
J.					
Jewelry-box.....	E. C. Moore.....	6, 721	June 24, 1873	3	691
Jewelry-box.....	E. C. Moore.....	6, 773	July 15, 1873	4	58
Jewelry-case.....	M. Hendberg.....	6, 540	Apr. 1, 1873	3	356
K.					
Kettle-cover handle.....	R. B. Wardin.....	6, 376	Jan. 28, 1873	3	100
Key-hole escutcheon.....	W. Gorman.....	7, 021	Dec. 9, 1873	4	614
Key-hole escutcheon.....	J. B. Whitney.....	6, 365	Jan. 21, 1873	3	71
Kite.....	S. M. Simons.....	6, 961	Oct. 14, 1873	4	401
Knife, fork, and spoon handle.....	W. Rogers.....	6, 585	Apr. 8, 1873	3	387
Knife-handle.....	J. D. Frary.....	7, 002	Nov. 25, 1873	4	558
Knife or fork bolster.....	C. H. Crump.....	6, 649	May 13, 1873	3	527
Knitted fabric.....	T. Langham.....	6, 889	Sept. 16, 1873	4	296
Knob and plate.....	G. E. Bringman.....	6, 614	Apr. 29, 1873	3	471
Knob, Door.....	W. Gorman.....	7, 020	Dec. 9, 1873	4	614
Knob, Door.....	J. O. Hollis.....	6, 956	Oct. 14, 1873	4	401
Knob, Door.....	G. W. White.....	6, 623	Apr. 29, 1873	3	471
Knob, Door.....	J. B. Whitney.....	6, 363-6, 364	Jan. 21, 1873	3	71
Knob rose and escutcheon.....	W. Gorman.....	7, 068	Dec. 23, 1873	4	671
Knob-rose, Door.....	W. Gorman.....	7, 019	Dec. 9, 1873	4	614
L.					
Label.....	A. M. Thompson and J. E. Taylor.....	7, 082	Dec. 30, 1873	4	698
Lamp.....	D. Ashworth.....	6, 385	Feb. 11, 1873	3	156
Lamp-bowl.....	J. S. and T. B. Atterbury.....	6, 882	Sept. 16, 1873	4	296
Lamp-chimney.....	M. J. Wellman.....	6, 555-6, 556	Apr. 1, 1873	3	357
Lamp-foot.....	T. B. and J. S. Atterbury.....	6, 948	Oct. 7, 1873	4	380
Lamp-foot.....	N. L. Bradley.....	6, 899	Sept. 30, 1873	4	354
Lamp-pedestal.....	N. L. Bradley.....	7, 049	Dec. 16, 1873	4	641
Lamp-post.....	P. H. Jackson.....	6, 348	Jan. 21, 1873	3	70
Lamp-shade.....	W. L. Libbey.....	7, 023	Dec. 9, 1873	4	614
Lamp-shade.....	W. Maeyers.....	6, 897	Sept. 30, 1873	4	354
Lamp-stand.....	D. Mosman.....	6, 490	Mar. 11, 1873	3	272
Lamp-stand.....	M. H. Mosman.....	6, 616	Apr. 29, 1873	3	471
Lamp-stand.....	W. H. Perkins.....	6, 876	Sept. 9, 1873	4	270
Latch and handle, Door.....	A. Wunder.....	6, 537	Mar. 25, 1873	3	325
Lath-machine bed.....	W. F. Burton.....	6, 703	June 17, 1873	3	663
Lathe-dog.....	B. L. Lathrop.....	6, 933	Oct. 7, 1873	4	380
Lock-case.....	W. H. Andrews.....	6, 996	Nov. 18, 1873	4	531
Lock-case.....	L. Widmayer.....	7, 076	Dec. 23, 1873	4	671
Lock escutcheon-plate.....	W. Gorman.....	6, 867	Sept. 2, 1873	4	241
Lock-front.....	E. J. Steele.....	6, 723	June 24, 1873	3	691
Lounge.....	J. B. Rohrer.....	6, 492	Mar. 11, 1873	3	272
Lounge.....	J. B. Rohrer.....	6, 507	Mar. 18, 1873	3	297
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Match-safe	W. A. Haynes	6, 974	Nov. 4, 1873	4	478
Monument	W. T. Cross	6, 368	Jan. 28, 1873	3	100
Monument	M. V. Mitchell	6, 881	Sept. 9, 1873	4	270
Monument	J. Sharkey	6, 693	May 27, 1873	3	586
Muff	M. Gross and B. B. Zippert	6, 826	Aug. 26, 1873	4	212
Music-stand	W. B. Bigelow	6, 538	Apr. 1, 1873	3	356
N.					
Nubia	H. Boot	6, 776-6, 778	July 22, 1873	4	85
Nubia	H. Boot	6, 792	Aug. 5, 1873	4	135
Nubia	J. Phipps	6, 696	June 3, 1873	3	608
Nubia	J. Phipps	6, 710	June 17, 1873	3	663
O.					
Oil-cloth	J. Barrett	6, 810	Aug. 19, 1873	4	185
Oil-cloth	J. Hutchison	6, 343-6, 347	Jan. 21, 1873	3	70
Oil-cloth	J. Hutchison	6, 812-6, 818	Aug. 19, 1873	4	185
Oil-cloth	H. Kagy	6, 349-6, 350	Jan. 21, 1873	3	70
Oil-cloth	H. Kagy	6, 991-6, 994	Nov. 11, 1873	4	504
Oil-cloth	C. T. and V. E. Meyer	6, 431-6, 436	Feb. 18, 1873	3	189
Oil-cloth	C. T. and V. E. Meyer	6, 786-6, 789	July 29, 1873	4	108
Oil-cloth	C. T. and V. E. Meyer	6, 871	Sept. 2, 1873	4	242
Oil-cloth	C. T. and V. E. Meyer	6, 885	Sept. 16, 1873	4	296
Oil-cloth	C. T. and V. E. Meyer	6, 999-7, 001	Nov. 18, 1873	4	531
Oil-cloth and carpet, Floor	C. T. and V. E. Meyer	7, 035-7, 037	Dec. 9, 1873	4	614
Oil-cloth, &c., Floor	C. T. and V. E. Meyer	6, 526-6, 527	Mar. 25, 1873	3	325
Oil-cloth, &c., Floor	C. T. and V. E. Meyer	6, 951	Oct. 7, 1873	4	380
Oil-cloth, Floor	C. T. and V. E. Meyer	6, 494-6, 505	Mar. 18, 1873	3	297
Oil-cloth, Floor	C. T. and V. E. Meyer	6, 546-6, 547	Apr. 1, 1873	3	357
Oil-cloth, Floor	C. T. and V. E. Meyer	6, 980-6, 981	Nov. 4, 1873	4	478
Organ-case	L. K. Fuller	6, 677	May 27, 1873	3	586
Organ-case	S. Hayward	6, 509-6, 511	Mar. 18, 1873	3	297
Organ-case	S. Hayward	6, 679	May 27, 1873	3	586
Organ-case, Ends of	L. K. Fuller	6, 678	May 27, 1873	3	586
Organ-case, Ends of	S. Hayward	6, 680	May 27, 1873	3	586
Organ case, Reed	J. R. Lomas	6, 603	Apr. 22, 1873	3	444
Ornamentation	G. Rogers	6, 488	Mar. 4, 1873	3	245
Ottoman	C. J. Conradt	6, 456	Feb. 25, 1873	3	218
Ottoman	J. D. Ladd	6, 455	Feb. 18, 1873	3	189
Ottoman	J. D. Ladd	6, 457	Feb. 25, 1873	3	218
Overshoe	G. Watkinson	6, 986	Nov. 4, 1873	4	478
P.					
Paper box	E. C. Moore	6, 982	Nov. 4, 1873	4	478
Paper clip	T. Orton	6, 830	Aug. 26, 1873	4	212
Paper, Shelf	S. Simon	6, 766-6, 768	July 8, 1873	4	36
Pen-sign	L. W. Fairchild	6, 539	Apr. 1, 1873	3	356
Pencil	E. S. Johnson	6, 523	Mar. 25, 1873	3	325
Pencil-case	E. Todd	7, 006	Dec. 2, 1873	4	585
Phaeton-body	G. Delker and C. L. Blondin	6, 770	July 8, 1873	4	36
Picture frame	B. H. Slusser and L. Pearson	6, 609	Apr. 22, 1873	3	445
Picture frame	L. Steinhilper and L. Welker	6, 536	Mar. 25, 1873	3	325
Picture-frame, &c.	J. Nonnenbacher	6, 959	Oct. 14, 1873	4	401
Picture-frame, &c.	J. Nonnenbacher	6, 995	Nov. 11, 1873	4	505
Picture-frame molding	S. Garrison	6, 742	July 1, 1873	4	8
Pin-cushion	A. Merriam and C. L. Little	7, 081	Dec. 30, 1873	4	698
Plant-stand	J. R. Robertson	6, 580	Apr. 8, 1873	3	387
Plaster-cast	F. S. Batcheller	6, 741	July 1, 1873	4	8
Pump, Ale	S. Lane, jr.	6, 699-6, 700	June 10, 1873	3	640
R.					
Railway-station	J. W. Hoyt	6, 760	July 8, 1873	4	36
Range, Cooking	S. S. Utter	6, 745	July 1, 1873	4	8
Ruche-holder	D. Kisch	6, 880	Sept. 9, 1873	4	270
Ruffle-stand	L. Sutro	6, 650	May 13, 1873	3	527
Ruffling	S. E. Barney	7, 077	Dec. 30, 1873	4	698
S.					
Sad-iron handle	J. Hargrave	6, 874	Sept. 9, 1873	4	270
Saw-frame	T. S. and H. Disston, 2d	6, 825	Aug. 26, 1873	4	212
Saw frame, Band	L. M. Collins	6, 803	Aug. 19, 1873	4	185
Scarf	C. Button	6, 673-6, 676	May 27, 1873	3	585
Seal-press	C. A. Mathieson and J. C. Schrader	6, 806	Aug. 19, 1873	4	185
Sewing-machine	G. Rehfuß	6, 375	Jan. 28, 1873	3	100
Sewing-machine frame	J. O'Neil	6, 451	Feb. 18, 1873	3	189
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Show-card for head-nets	T. Hall	6, 341	Jan. 14, 1873	3	38
Show-case	J. Irons	7, 062	Dec. 16, 1873	4	641
Show-case, Corner of glass	T. Vaughn	7, 047	Dec. 9, 1873	4	615
Sign	H. B. Titus	6, 795	Aug. 5, 1873	4	135
Skirts, Material for gored	J. Anderson	6, 829	Aug. 26, 1873	4	212
Slate-frame	J. M. Coffin	6, 684	May 27, 1873	3	586
Sleigh, Landau	J. C. Goold	6, 410	Feb. 11, 1873	3	157
Soda-water apparatus	C. Lippincott and J. Patterson	6, 541-6, 543	Apr. 1, 1873	3	356

Alphabetical list of designs—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Soda-water apparatus, Casing for	G. F. Meacham	6, 366-6, 367	Jan. 21, 1873	3	71
Soda-water apparatus, Casing for	G. F. Meacham	6, 690	May 27, 1873	3	586
Soda-water apparatus, Casing of	G. F. Meacham	7, 063	Dec. 16, 1873	4	641
Spoon and fork	G. Wilkinson	6, 969	Oct. 28, 1873	4	452
Spoon, fork, &c., Handle of	B. D. Biederhase	6, 967	Oct. 28, 1873	4	452
Stair-rod	W. T. Mersereau	6, 615	Apr. 29, 1873	3	471
Stamp pad and rack	G. K. Cooke	6, 798	Aug. 12, 1873	4	159
Statuary, Group of	J. Rogers	6, 548	Apr. 1, 1873	3	357
Statuary, Group of	J. Rogers	7, 016	Dec. 2, 1873	4	585
Statue	J. Rogers	6, 960	Oct. 14, 1873	4	401
Stirrup, Safety	R. Reniff	6, 807	Aug. 19, 1873	4	185
Stocking-fabric	C. Button	6, 665-6, 672	May 27, 1873	3	585
Stocking-fabric	M. Landenberger, jr.	6, 651-6, 652	May 20, 1873	3	558
Stocking-fabric	M. Landenberger, jr.	6, 659	May 20, 1873	3	559
Stocking-fabric	M. Landenberger, jr.	6, 689	May 27, 1873	3	586
Stocking-fabric	J. W. Parks	6, 664	May 20, 1873	3	585
Stove	C. A. Culter and D. C. Proctor	6, 972	Nov. 4, 1873	4	478
Stove	C. Harris and E. Kummer	6, 369-6, 372	Jan. 28, 1873	3	100
Stove	H. S. and A. S. Hubbell	6, 977-6, 978	Nov. 4, 1873	4	478
Stove	J. Martina	6, 958	Oct. 14, 1873	4	401
Stove	W. D. Southard	6, 831	Aug. 26, 1873	4	212
Stove, Base-burning	N. S. Vedder and T. S. Heister	7, 012	Dec. 2, 1873	4	585
Stove, Box	N. S. Vedder and T. S. Heister	7, 011	Dec. 2, 1873	4	585
Stove, Cook	W. G. Semple	6, 549	Apr. 1, 1873	3	357
Stove, Cooking	M. M. Coppuck	6, 618	Apr. 29, 1873	3	471
Stove, Cooking	R. R. Finch	6, 685	May 27, 1873	3	586
Stove, Cooking	E. Mingay	6, 965	Oct. 21, 1873	4	425
Stove, Cooking	J. Peckover	6, 692	May 27, 1873	3	586
Stove, Cooking	G. Smith and H. Brown	6, 701	June 10, 1873	3	640
Stove, Cooking	W. S. Stevenson	6, 737	July 1, 1873	4	7
Stove, Cooking	N. S. Vedder and T. S. Heister	7, 008-7, 010	Dec. 2, 1873	4	585
Stove, Cooking	N. S. Vedder and F. Ritchie	7, 007	Dec. 2, 1873	4	585
Stove, Cooking	N. S. Vedder and F. Ritchie	7, 048	Dec. 9, 1873	4	615
Stove, Cooking	H. A. Wood	6, 377	Jan. 28, 1873	3	100
Stove, Fire-place	S. B. Sexton	6, 877	Sept. 9, 1873	4	270
Stove, Heating	I. J. Baxter	6, 340	Jan. 14, 1873	3	38
Stove, Heating	J. Beesley	6, 697	June 3, 1873	3	608
Stove, Heating	J. V. B. Carter	6, 704	June 17, 1873	3	663
Stove, Heating	J. Magee	6, 979	Nov. 4, 1873	4	478
Stove, Heating	N. S. Vedder, F. Ritchie, and T. S. Heister	7, 014	Dec. 2, 1873	4	585
Stove, Parlor	W. Doyle	6, 586	Apr. 15, 1873	3	417
Stove, Parlor	N. S. Vedder and T. S. Heister	7, 013	Dec. 2, 1873	4	585
Stove plates, Cooking	S. H. Ransom	6, 726-6, 731	June 24, 1873	3	691
Stove, Plates of parlor or heating	S. H. Ransom	6, 732-6, 733	June 24, 1873	3	691
Sword hilt and scabbard	V. Price	6, 338	Jan. 7, 1873	3	7
Sword hilt and scabbard	V. Price	6, 763	July 8, 1873	4	36
Sword hilt and scabbard	V. Price	6, 953	Oct. 7, 1873	4	380
T.					
Tailor's goose	J. Hargrave	6, 832	Sept. 2, 1873	4	241
Tea and coffee pot base	E. B. Manning	6, 898	Sept. 30, 1873	4	354
Tea-service	G. Gill	6, 802	Aug. 12, 1873	4	159
Toy-bank	F. W. Smith	6, 744	July 1, 1873	4	8
Toy-bank	T. Swann	6, 946	Oct. 7, 1873	4	380
Toy rail-car	W. A. Harwood	6, 868	Sept. 2, 1873	4	241
Toy savings-bank	R. Frisbie	6, 619	Apr. 29, 1873	3	471
Toy-target	S. Hamm	6, 966	Oct. 28, 1873	4	452
Trimming	J. B. Clarke	6, 572	Apr. 8, 1873	3	387
Trimming	J. Phipps	6, 637-6, 638	May 6, 1873	3	497
Tug-clip	J. Letchworth	6, 883	Sept. 16, 1873	4	296
Tumbler-holder	C. Lippincott and J. Patterson	6, 544	Apr. 1, 1873	3	356
Type	J. Herriet	6, 626-6, 627	May 6, 1873	3	497
Type, Printing	J. M. Conner	6, 573-6, 574	Apr. 8, 1873	3	387
Type, Printing	J. M. Conner	7, 080	Dec. 30, 1873	4	698
Type, Printing	H. Ilisbury	6, 989-6, 990	Nov. 11, 1873	4	504
Type, Printing	A. Little	6, 359	Jan. 21, 1873	3	71
Type, Printing	A. Little	6, 735-6, 736	July 1, 1873	4	7
Type, Printing	A. Little	6, 761	July 8, 1873	4	36
Type, Printing	W. H. Page	7, 072-7, 074	Dec. 23, 1873	4	671
Type, Printing	E. C. Ruthven	6, 890	Sept. 23, 1873	4	322
Type, Printing	E. C. Ruthven	6, 954	Oct. 7, 1873	4	380
Type, Printing	R. Smith	6, 351	Jan. 21, 1873	3	70
Type, Printing	R. Smith	6, 769	July 8, 1873	4	36
Type, Printing	R. Smith	6, 892-6, 893	Sept. 23, 1873	4	322
Type, Wood	J. F. Blackman	6, 342	Jan. 21, 1873	3	70
U.					
Urn for hot-water, &c.	P. P. Meyer	6, 382	Feb. 4, 1873	3	127
Urn, Ornamental	N. Brayer	6, 785	July 29, 1873	4	108
V.					
Vase	W. H. Wilkinson	6, 384	Feb. 4, 1873	3	127
Vase, Flower	J. Mersereau	6, 709	June 17, 1873	3	663
Veil	S. M. Meyenberg and R. Collinge	6, 870	Sept. 2, 1873	4	241
W.					
Watch-chain	H. H. Markley and A. Mathieu	6, 804	Sept. 16, 1873	4	296
Watch-chain charm	W. B. Hamm	6, 759	July 8, 1873	4	36
Watch-hands	B. A. Goodell	6, 698	June 3, 1873	3	608
Work-holder	R. W. Perkins	6, 491	Mar. 11, 1873	3	272

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
A.							
Air-brake device, Steam-power	G. Westinghouse, jr.	5,505	July 29, 1873	1,014	329	4	126
Air or gas with hydro-carbon vapors, Apparatus for charging.	E. H. Covell	5,465	June 24, 1873	839	266	3	708
Anchor for securing cores	Z. Ellis	5,540	Aug. 19, 1873	618	204	4	202
Animal and vegetable substance, Process and apparatus for preserving.	C. Alden	5,648	Nov. 11, 1873	360	122	4	519
Auger	B. Walch	5,238	Jan. 14, 1873	438	139	3	55
Auger-bits, Machine for forming	W. A. Ives	5,455	June 17, 1873	623	196	3	682
Auger-bits, Machine for manufacturing.	J. Swan, by R. P. Bruff, assignee.	5,624	Oct. 21, 1873	534	176	4	442
Auger, Earth	S. H. Dickerson	5,508	July 29, 1873	1,018	330	4	126
Auger, Hollow	W. A. Clark	5,393	May 6, 1873	237	74	3	517
Automatic gate	W. I. Wooster	5,489	July 15, 1873	592	199	4	76
Axle-box, Car	A. Higley, by Higley Car-Journal Company, assignees.	5,453	June 17, 1873	621	195	3	682
B.							
Bag-machine.	J. M. Hurd	5,454	June 17, 1873	622	196	3	682
Bail-car, Metallic	T. Evans	5,578	Sept. 23, 1873	781	269	4	338
Bale-tie	D. McComb, by M. A. McComb, administratrix.	5,616	Oct. 21, 1873	521	174	4	441
Bale tie, Cotton	G. Brodie, by J. J. McComb, assignee.	5,333	Mar. 25, 1873	843	277	3	342
Bale tie, Cotton	A. J. Going	5,553	Aug. 26, 1873	843	278	4	230
Bale tie, Cotton	J. R. McClintock and J. Cumberland, by A. J. Aiken, assignee, (mesne.)	5,404	May 13, 1873	456	144	3	545
Bale tie, Cotton	J. McMurtry, by F. Cook, assignee, (mesne.)	5,457	June 17, 1873	626	196	3	683
Bale tie, Cotton	J. McMurtry, by F. Cook, assignee.	5,617	Oct. 21, 1873	522	175	4	441
Bale and socket joint.	M. W. St. John	5,679	Dec. 9, 1873	392	129	4	629
Band-comb	C. H. Noyes	5,348	Apr. 8, 1873	438	135	3	404
Basket	R. B. Wheeler, by H. Lardner, assignee.	5,332	Mar. 18, 1873	630	208	3	314
Bed-bottom	S. Pearson, by E. G. Gory.	5,604	Oct. 14, 1873	328	109	4	415
Bed-bottom	A. Turnbull and R. S. Webb, by National Wire-Mattress Company, assignee, (mesne.)	5,312	Mar. 5, 1873	213	70, 71	3	262
Bed-bottom	A. Turnbull	5,591	Oct. 7, 1873	146	48	4	392
Bed-bottom, Spring	H. D. W. Bailey	5,286	Feb. 18, 1873	681	220	3	206
Bed, Cot.	S. B. Morse, by L. Morse, assignee.	5,380	Apr. 29, 1873	1,111	351	3	489
Bedstead	S. Caro	5,275	Feb. 11, 1873	447	146	3	174
Bedstead-fastening	L. W. Buxton	5,447	June 17, 1873	612	193	3	681
Bedstead-fastening	T. W. Moore, by F. W. Moore, assignee.	5,603	Oct. 14, 1873	328	109	4	415
Bedstead, Sofa	J. B. Harlow	5,678	Dec. 9, 1873	391	129	4	629
Billiard-cue	H. Platts	5,522	Aug. 5, 1873	187	60	4	150
Billiard-cushion	M. Delaney	5,681	Dec. 9, 1873	395	129	4	629
Billiard-cushions, Mold for rubber	M. Delaney	5,680	Dec. 9, 1873	393	129	4	629
Billiard-table cushion	H. W. Collender	5,241	Jan. 21, 1873	634	207	3	86
Billiard-table cushion	G. D. Sharp	5,349	Apr. 8, 1873	439	136	3	404
Blind-slat operator	B. J. Williams	5,528	Aug. 5, 1873	195	61	4	151
Blind-stiles boring and mortising machine	L. Worcester	5,568	Sept. 9, 1873	393	{ 131 } { 132 }	4	285
Boat-detaching apparatus.	S. Sneed	5,584	Sept. 30, 1873	952	321	4	368
Boat-owering apparatus	G. W. Mallory	5,512	July 29, 1873	1,021	331	4	126
Boilerl-feeder, Automatic	S. Cook, by Automatic Boiler-Feeder Company, assignee, (mesne.)	5,276	Feb. 11, 1873	448	146	3	174
Boot	P. West and G. S. Lee	5,670	Nov. 25, 1873	763	257	4	575
Boot and shoe nailing machine	{ L. R. Blake and A. S. Libby, by } { G. McKay, trustee and as- } signee.	5,696	Dec. 23, 1873	808	{ 264 } { 265 }	4	687
Boot and shoe seam	S. A. Brackett and W. W. Whitcomb.	5,391	May 6, 1873	235	73	3	516
Boots and shoes, Wooden shank for	J. M. Watson, by self and H. A. Lothrop, assignees.	5,315	Mar. 4, 1873	218	72	3	263
Boots and shoes, Machine for punching the lifts of.	G. W. Ellis, by J. W. Brooks, trustee and assignee, (mesne.)	5,539	Aug. 19, 1873	616	203	4	202
Boring-machine	N. R. Merchant, by A. P. and M. Merchant, assignee and administrator.	5,222	Jan. 7, 1873	212	68	3	23
Bracelet	J. S. Palmer	5,571	Sept. 9, 1873	397	133	4	286
Bracket	F. M. Sweet, by D. D. and A. E. Coddington and T. J. Smith, assignees.	5,311	Mar. 4, 1873	213	70	3	262
Branding-apparatus	J. W. Dodge	5,420	May 20, 1873	704	221	3	578
Brick-machine	R. A. Smith	5,390	Apr. 29, 1873	1,122	354	3	490

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Bridge, Draw.....	L. Schneider and J. A. Montgomery, by L. Schneider, assignee.	5,372	Apr. 22, 1873	883	279	3	462
Broiler.....	W. T. Howard, by H. G. Leisenring, assignee.	5,240	Jan. 21, 1873	633	207	3	86
Buckle.....	J. A. Mashmeyer, by S. S. Sargeant, assignee.	5,411	May 13, 1873	464	146	3	546
Building-block, Machine for forming.....	J. S. Elliott, by Union Stone Company, assignees.	5,401	May 13, 1873	453	143	3	545
Burring-machine cylinder.....	J. K. Proctor, by C. R. Lindsay, assignee.	5,493	July 15, 1873	595	200	4	76
Bustle.....	M. K. Bortree.....	5,484	July 15, 1873	587	197	4	75
Bustle.....	H. H. May.....	5,416	May 20, 1873	700	219	3	598
Butter-package.....	H. P. Adams.....	5,464	June 24, 1873	838	266	3	708
Button-fastening.....	E. F. Lee, by J. Wienhold, assignee.	5,403	May 13, 1873	455	143	3	545
Buttons, Machine for making glass.....	H. Bock, by W. W. McFarlan, assignee.	5,517	Aug. 5, 1873	181	58	4	150
Buttons, Process of preparing wood for the manufacture of.	R. H. Isbell.....	5,694	Dec. 23, 1873	806	.....	4	686
C.							
Caps, Mechanism for shearing.....	R. Cooke and T. Hanford.....	5,642	Nov. 4, 1873	170	59, 60	4	493
Car-brake apparatus, Steam-power.....	G. Westinghouse, jr.....	5,506	July 29, 1873	1,016	329	4	329
Car brake, Railway.....	S. and W. W. Balkwill.....	5,271	Feb. 11, 1873	444	145	3	174
Car-coupling attachment.....	W. G. Brown and J. W. Jedkins.	5,587	Oct. 7, 1873	143	47	4	392
Car door, Grain.....	C. Barker, by self and T. C. Thomas, assignees.	5,671	Dec. 2, 1873	207	70	4	601
Car, Dumping.....	J. Hughes.....	5,541	Aug. 19, 1873	619	204	4	202
Car-frame.....	W. G. Von Staden.....	5,482	July 8, 1873	369	125	4	50
Car, Hand.....	H. L. Brown.....	5,273	Feb. 11, 1873	446	145	3	174
Car, Hand.....	H. L. Brown.....	5,274	Feb. 11, 1873	447	145	3	174
Car, Railway oil.....	S. W. Murray and B. P. Lamason.	5,406	May 13, 1873	458	144	3	545
Car-roof.....	J. C. Wands.....	5,515	July 29, 1873	1,023	{ 331 } { 332 }	4	126
Car-seat end-frame..... (Design)	G. Buntin.....	5,480	July 8, 1873	367	124	4	49
Car-wheels, Casting.....	J. K. Sax.....	5,716	Dec. 30, 1873	1,010	325	4	714
Car-wheels, Manufacture of.....	W. G. Hamilton, by Hamilton Steele-Wheel Company, assignee.	5,298	Feb. 25, 1873	894	.....	3	235
Cars, Body-bolster for railway.....	A. Ward.....	5,560	Sept. 2, 1873	204	66	4	258
Carbureter.....	H. S. Maxim, by Maxim Gas Machine Company, assignee, (mesne.)	5,247	Jan. 21, 1873	643	209	3	87
Carriage-seat, Clamping movable.....	S. W. Beach, by Beach Patent-Shifting Carriage-Seat Manufacturing Company, assignee.	5,262	Jan. 28, 1873	848	273	3	116
Carriage-spring clip-plate.....	N. C. Dean, by S. S. Bliss, assignee.	5,490	July 15, 1873	593	199	4	76
Carriage-step cover and wheel-fender.....	J. W. Gosling.....	5,644	Nov. 4, 1873	179	60	4	493
Carriage-wheel.....	S. Vreeland, by Metallic Suspension-Wheel Company, assignee, (mesne.)	5,237	Jan. 14, 1873	437	139	3	55
Cartridge, Patched.....	W. H. Elliot, by E. Remington & Sons, assignees.	5,577	Sept. 23, 1873	780	269	4	338
Carving-machine.....	B. J. Tayman.....	5,594	Oct. 7, 1873	149	49	4	392
Cement pipes, Device for lining.....	M. Stephens.....	5,494	July 15, 1873	596	200	4	76
Cheese-press.....	G. B. Boomer, T. G. Morse, and R. E. Boschert, said Boomer assignee of said Morse.	5,256	Jan. 28, 1873	841	271	3	115
Clothes-wringer.....	A. Albrecht, by American Machine Company, assignee, (mesne.)	5,261	Jan. 28, 1873	848	273	3	115
Clothes-wringer.....	J. Brinkerhoff.....	5,218	Jan. 7, 1873	208	67	3	23
Clothes-wringer.....	R. S. Cathcart, by Queen City Wringer Company, assignee, (mesne.)	5,360	Apr. 22, 1873	866	274	3	461
Clothes-wringer.....	A. H. Page, by Metropolitan Washing-Machine Company, assignee, (mesne.)	5,223	Jan. 7, 1873	213	68	3	23
Clothes-wringer.....	A. H. Page, by Metropolitan Washing-Machine Company, assignee, (mesne.)	5,224	Jan. 7, 1873	214	69	3	24
Clothes-wringer.....	A. H. Page, by Metropolitan Washing-Machine Company, assignee, (mesne.)	5,225	Jan. 7, 1873	215	69	3	24
Clothes-wringer.....	T. Pool, by Metropolitan Washing-Machine Company, assignee.	5,330	Mar. 18, 1873	628	207	3	314
Coal-drilling machine.....	J. Grimm.....	5,499	July 22, 1873	792	259	4	101
Coffee, Compound for coating roasted.....	J. T. Cooke.....	5,383	Apr. 29, 1873	1,115	.....	3	489
Coffee-cooler.....	J. Burns.....	5,658	Nov. 18, 1873	561	190	4	547
Coffin-handle.....	C. Strong.....	5,374	Apr. 22, 1873	886	279	3	462
Coke from lignite, &c., Process of making.....	H. Engelmann.....	5,486	July 15, 1873	588	198	4	75
Collar and cuff, Ladies'.....	W. E. Lockwood.....	5,259	Jan. 28, 1873	845	272	3	115
Collars, caps, and harness, Lining for horse.....	D. Curtis, by H. Gilman and G. H. Richards, assignees.	5,251	Jan. 21, 1873	647	210	3	87
Collars, caps, and harness, Lining for horse.....	D. Curtis, by G. H. Richards and H. Gilman, assignees.	5,443	June 10, 1873	382	119	3	655
Collars, &c., Lining for wooden horse.....	D. Curtis.....	5,250	Jan. 21, 1873	646	210	3	87
Combination-lock.....	H. Clarke, by Clarke Lock Company, assignee.	5,497	July 22, 1873	789	258	4	100

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Condenser and feed-water heater for steam-engines	J. Dilworth and J. C. Hodgins, by J. C. Hodgins, T. K. Morgan, and H. Thorn, assignees.	5,394	May 6, 1873	238	74	3	517
Copying press, Letter	G. C. Taft	5,417	May 20, 1873	701	220	3	578
Corpse-preserving case	J. S. Waterman	5,355	Apr. 15, 1873	655	206	3	435
Corset-spring	S. H. Barnes, by F. S. Egbert, executrix.	5,216	Jan. 7, 1873	206	66	3	23
Cotton-gin	R. McKenna	5,663	Nov. 18, 1873	567	192	4	547
Cotton-gin saw	T. C. Craven, by B. H. Jenks, assignee.	5,229	Jan. 14, 1873	427	137	3	54
Cotton-press	M. M. Jones	5,319	Mar. 11, 1873	409	135	3	287
Cotton-seed hulling-machine	W. R. Fee	5,550	Aug. 26, 1873	837	278	4	230
Coupling and steering apparatus	J. McCreary	5,630	Oct. 28, 1873	739	246	4	469
Cradle	L. A. Chichester	5,496	July 22, 1873	788	258	4	100
Cradle	F. Chichester, by self and L. A. Chichester, assignees.	5,683	Dec. 16, 1873	609	199	4	659
Cradle	L. Sperry and L. Robinson, by L. & A. Sperry, assignees.	5,331	Mar. 18, 1873	629	207	3	314
Culinary pot	J. S. Kidd and M. L. Melville	5,246	Jan. 21, 1873	642	209	3	87
Cultivator	C. M. & D. E. Hall, by C. M. Hall, assignee.	5,601	Oct. 14, 1873	325	108	4	414
Cultivator	C. P. Norton, by J. P. Pillsbury, assignee.	5,557	Aug. 26, 1873	850	280	4	231
Cultivator	R. B. Robbins	5,676	Dec. 2, 1873	211	72	4	602
Cultivator	A. C. Smith	5,547	Aug. 19, 1873	625	206	4	203
Cultivator and plow combined	L. R. Wright	5,532	Aug. 12, 1873	401	130	4	175
Curtain-fixture	C. Eaton	5,576	Sept. 23, 1873	779	269	4	338
Curtain-fixture	L. A. Tripp, by the Salem Shade-Roller Manufacturing Company, assignee, (mesne.)	5,439	June 3, 1873	188	61	3	624
Cut-off and regulating-cock for gas	C. E. Seal, by E. F. Brooks, assignee.	5,585	Sept. 30, 1873	953	321	4	368
D.							
Damper, Stove-pipe	R. M. Breckenridge	5,239	Jan. 21, 1873	633	206	3	86
Dental instrument	I. A. Salmon	5,623	Oct. 21, 1873	533	176	4	442
Dental plates, &c., Composition for	G. F. J. Colburn, by W. M. Wel-ling, assignee.	5,572	Sept. 16, 1873	582	.....	4	312
Distilling turpentine	A. K. Lee	5,351	Apr. 15, 1873	649	205	3	434
Dividers	O. E. Weatherhead, by A. A., G. L., and S. W. Cooke, assignees.	5,290	Feb. 18, 1873	685	221	3	206
Dress-facing	W. H. Gallup	5,492	July 15, 1873	595	200	4	76
E.							
Egg-carrier	O. T. Bedell, by W. D. Taber, P. P. Josef, and E. Striber, assignees, (mesne.)	5,575	Sept. 23, 1873	778	268	4	338
Egg-carrier	A. H. Bryant	5,293	Feb. 25, 1873	889	286	3	235
Egg-carrier	A. H. Bryant	5,392	May 6, 1873	236	74	3	516
Egg-carrier	W. D. Taber, by P. P. Josef and E. Striber, assignees.	5,300	Feb. 25, 1873	897	288	3	235
Egg stand and boiler	E. P. Woods and D. Sherwood, by selves and C. H. Latham, assignees.	5,269	Feb. 4, 1873	218	68	3	144
Egg stand and boiler	E. P. Woods and D. Sherwood, by selves and C. H. Latham, assignees.	5,270	Feb. 4, 1873	219	68	3	144
Egg stand and boiler	E. P. Woods and D. Sherwood, by selves and C. H. Latham, assignees.	5,483	July 8, 1873	370	125	4	50
Elevator	E. T. Hope, by S. I. Thursby, assignee.	5,556	Aug. 26, 1873	849	280	4	231
Elevator	H. S. Stewart	5,268	Feb. 4, 1873	217	67	3	144
Engraving and carving machine	T. W. Minter	5,458	June 17, 1873	626	197	3	683
Envelope	R. K. Kuhn and T. O. Atkinson	5,592	Oct. 7, 1873	147	49	4	329
Explosive compound	A. Nobel, by Giant Powder Company, assignee, (mesne.)	5,619	Oct. 21, 1873	523	.....	4	441
Eyelet-making machine	W. R. Landfear, by Hartford Eyelet Company, assignee, (mesne.)	5,662	Nov. 18, 1873	565	192	4	547
F.							
Feed-water heater and filter for steam-boiler	J. Armstrong	5,569	Sept. 9, 1873	395	132	4	285
Fence	I. L. Landis	5,511	July 29, 1873	1,020	330	4	126
Fence, Constructing wire	J. W. Rappleye	5,688	Dec. 16, 1873	613	201	4	659
Fire-arm, Breech-loading	W. C. Hicks	5,564	Sept. 9, 1873	387	130	4	285
Fire-arm, Breech-loading	J. V. Meigs	5,433	June 3, 1873	179	59	3	623
Fire-arm, Breech loading and repeating	H. Smith and D. B. Wesson, by Winchester Repeating-Arms Company, assignee, (mesne.)	5,710	Dec. 30, 1873	1,002	323	4	713
Fire-arm, Revolving	J. Rupertus	5,631	Oct. 28, 1873	740	247	4	469
Fire-arm, Revolving	R. White	5,691	Dec. 16, 1873	616	202	4	660
Fire-pipe for buildings, Stationary	H. Palmieri, by G. Monges, assignee.	5,608	Oct. 14, 1873	333	111	4	415
Fluting-iron	J. Hewitt	5,358	Apr. 15, 1873	658	206	3	435
Fluting-machine	J. W. Madden and J. Dodsworth, by J. Hewitt, assignee to said Dodsworth, (mesne.)	5,415	May 20, 1873	699	219	3	577
Foot-rest for chair, Extension	J. H. Travis	5,690	Dec. 16, 1873	615	201	4	660
Friction-coupling, Double	J. Hendy	5,335	Mar. 25, 1873	846	277	3	342
Fruit-basket	S. R. Conover, by J. A. Mount, assignee.	5,361	Apr. 22, 1873	867	275	3	461

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Fruit-basket.....	J. K. Park, by American Basket Company, assignee.	5, 579	Sept. 23, 1873	782	269	4	338
Fuel for heating, &c., Gasifying	W. Elmer	5, 283	Feb. 18, 1873	672	.....	3	206
Fuel for producing heat and light, Process and apparatus for using liquid.	T. S. Dickerson and R. M. Whipple.	5, 326	Mar. 18, 1873	624	206	3	214
Fuel, &c., Manufacture of inflammable gases for	W. Elmer	5, 284	Feb. 18, 1873	674	.....	3	206
Furnace	D. Harger	5, 614	Oct. 21, 1873	519	174	4	441
Fur-set box	J. W. Aikin and J. H. Stone, by F. Crane, assignee.	5, 430	June 3, 1873	176	58	3	623
G.							
Gaiters, Machinery for goring	J. Walden, by G. Platts, assignee.	5, 488	July 15, 1873	591	199	4	76
Gas, Apparatus for manufacture of illuminating.....	J. C. Tiffany	5, 324	Mar. 11, 1873	414	137	3	288
Gas fire-log	A. H. Mershon, by self and G. B. Mershon, assignees.	5, 278	Feb. 11, 1873	451	147	3	174
Gas from petroleum, &c., Manufacture and application of.	T. S. Dickerson, by self and R. M. Whipple, assignees.	5, 327	Mar. 18, 1873	625	206	3	314
Governor for steam-engines	G. W. Clark	5, 258	Jan. 28, 1873	344	272	3	115
Grain-drill	B. Kühns	5, 432	June 3, 1873	178	58	3	623
H.							
Hame-tug clip	J. B. Welpton	5, 376	Apr. 22, 1873	888	280	3	463
Hammer, Power	J. Palmer	5, 381	Apr. 29, 1873	1, 113	352	3	489
Harness-pad	J. Hughes	5, 628	Oct. 28, 1873	737	246	4	468
Harness-pad	J. Hughes	5, 629	Oct. 28, 1873	738	246	4	469
Harvester	L. M. Batty, by W. K. Miller, assignee.	5, 316	Mar. 11, 1873	403	134	3	287
Harvester	O. Billings	5, 538	Oct. 19, 1873	614	{ 202 } 203	{ 4 } 3	202
Harvester	C. Crook, by M. G. Hubbard, assignee.	5, 428	May 27, 1873	909	293	3	602
Harvester	C. Crook, by M. G. Hubbard, assignee.	5, 429	May 27, 1873	910	293	3	602
Harvester	T. N. Foster, by H. H. Doubleday, assignee.	5, 606	Oct. 14, 1873	331	{ 109 } 110	{ 4 } 3	415
Harvester	T. N. Foster, by H. H. Doubleday, assignee.	5, 607	Oct. 14, 1873	332	{ 110 } 111	{ 4 } 3	415
Harvester	J. Pine	5, 714	Dec. 30, 1873	1, 008	324	4	713
Hatchway	J. D. Sinclair, by E. A. Lambert, W. S. Harris, and N. B. Rhodes, assignees, (mesne.)	5, 387	Apr. 29, 1873	1, 118	353	3	489
Hay and manure fork	L. D. Pitcher	5, 279	Feb. 11, 1873	452	147	3	175
Hay-rake, Horse	B. J. Downing	5, 704	Dec. 23, 1873	819	267	4	687
Hay-rake, Horse	H. W. Sabin, by C. E. Cox, executrix.	5, 242	Jan. 21, 1873	635	207	3	86
Hay-rake, Horse	H. W. Sabin, by C. E. Cox, executrix.	5, 243	Jan. 21, 1873	637	208	3	87
Hay-rake, Horse	H. W. Sabin, by C. E. Cox, executrix.	5, 244	Jan. 21, 1873	639	208	3	87
Hay-rake, Horse	H. W. Sabin, by C. E. Cox, executrix.	5, 245	Jan. 21, 1873	641	208	3	87
Heads, Manufacture of spring	G. Hopson	5, 219	Jan. 9, 1873	209	67	3	23
Heels of boots and shoes, Machinery for trimming the.	C. H. Helmes, by J. W. Brooks, trustee and assignee, (mesne.)	5, 424	May 27, 1873	905	292	3	602
Heels to boots and shoes and polishing same, Machinery for attaching.	G. W. Ellis and C. W. Glidden, by J. W. Brooks, trustee.	5, 413	May 20, 1873	696	{ 218 } 219	{ 3 } 3	577
Hominy-mill	T. Hudnut	5, 520	Aug. 5, 1873	185	59	4	150
Hoop-skirt	T. B. D. Forest and T. S. Gilbert, by A. K. Young, assignee, (mesne.)	5, 334	Mar. 25, 1873	844	277	3	342
Horse-grooming apparatus	J. J. Greenough	5, 589	Oct. 7, 1873	144	48	4	392
Horse-power	H. Smith	5, 226	Jan. 7, 1873	216	69	3	24
Horseshoe-nails, Machine for finishing	H. A. Wills, by J. A. Wills and L. S. Kingsland, assignees.	5, 249	Jan. 21, 1873	645	209	3	87
Horse sun-shield	H. D. McGovern	5, 456	June 17, 1873	625	196	3	682
Hot-air engine	A. K. Rider	5, 340	Mar. 25, 1873	851	279	3	343
Hub for vehicles	A. Warner, by E. Hall & Co., assignees, (mesne.)	5, 366	Apr. 22, 1873	877	277	3	462
Hydraulic telescopic platform-elevator	J. Parker and I. Cook, by S. P. Taylor, assignee of said Parker.	5, 296	Feb. 25, 1873	892	287	3	235
I.							
Ice-machine	F. P. E. Carré, by J. B. J. Mignon and H. S. Rouart, assignees.	5, 287	Feb. 18, 1873	682	220	3	206
Ice, Manufacture of	F. P. E. Carré, by J. B. J. Mignon and H. S. Rouart, assignees.	5, 288	Feb. 18, 1873	683	220	3	206
Ingot-mold	A. L. Holley	5, 318	Mar. 11, 1873	407	135	3	287
Ingot-molds, Stopper for	A. L. Holley	5, 317	Mar. 11, 1873	406	134	3	287
Inhaler	W. H. Cutler	5, 449	June 17, 1873	617	194	3	682
Inhaler	N. I. Donaldson	5, 491	July 15, 1873	593	200	4	76
J.							
Jelly-glass	W. Doyle	5, 356	Apr. 15, 1873	656	206	3	435
Journal-box	H. H. Thayer, by J. A. Woodbury, assignee.	5, 323	Mar. 11, 1873	414	137	3	287
K.							
Kaleidoscope	C. G. Bush, by self and J. W. Hoard, assignees.	5, 649	Nov. 11, 1873	362	122	4	519
King-bolt for railway-car trucks	S. W. Murray and B. P. Lamason	5, 546	Aug. 19, 1873	624	205	4	203
Knitting-machine	W. A. Tangeman	5, 552	Aug. 26, 1873	839	278	4	230
Knob, Door	C. Rebstock and J. Ottner, by Bridgeport Electro-Casting Co., assignee, (mesne.)	5, 445	June 10, 1873	384	119	3	656

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Knobs, Mold for casting	C. Rebstock and J. Ottner, by Bridgeport Electro-Casting Co., assignees, (mesne.)	5,444	June 10, 1873	383	119	3	655
Knobs to screws, Mode of attaching	C. H. Thurston	5,633	Oct. 28, 1873	744	247	4	469
L.							
Label-holder, Drawer-pull	J. A. Evarts and P. Cinquini, by Bradley & Hubbard, assignees.	5,395	May 6, 1873	239	74	3	517
Ladder, Step	C. Hays, by Kip Manufacturing Company, assignee.	5,451	June 17, 1873	619	195	3	682
Lamp	J. E. Ambrose, by S. T. Ambrose and E. Miller, assignees, (mesne.)	5,412	May 20, 1873	694	218	3	577
Lamp	C. A. Kleemann, by C. F. A. Hinrichs, assignee, (mesne.)	5,708	Dec. 30, 1873	999	322	4	713
Lamp, Hanging	G. Bohner	5,534	Aug. 19, 1873	610	201	4	201
Lantern, Magic	L. J. Marcy	5,638	Oct. 28, 1873	749	249	4	469
Lantern, Magic	L. J. Marcy	5,686	Dec. 16, 1873	611	200	4	659
Lasting boots and shoes, Hand-nailer for	W. E. Fischer, by C. H. Trask and F. Gould, assignees, (mesne.)	5,475	July 1, 1873	203	67	4	25
Latch, Gate	J. Bull, by Van Wagoner and Williams, assignees.	5,668	Nov. 25, 1873	761	257	4	574
Leather, Manufacture of	C. J. Tinnerholm, by J. C. White, assignee.	5,301	Feb. 25, 1873	898	.....	3	235
Leather, Treating tanned	B. H. Lightfoot	5,652	Nov. 11, 1873	360	.....	4	519
Life-preserving stool	H. T. Pratt	5,425	May 27, 1873	906	292	3	692
Lifting-jack	J. D. Otstot	5,263	Jan. 28, 1873	849	273	3	116
Liquid-evaporating process and apparatus	J. J. Johnston, by J. Campbell and C. Seibert, assignees.	5,570	Sept. 9, 1873	396	132	4	286
Locomotive-wheel	J. R. Richardson	5,665	Nov. 18, 1873	568	192	4	548
Log-turning machine	E. Tarrant, by A. Rodgers, assignee.	5,487	July 15, 1873	590	199	4	75
Loom for weaving pile-fabrics	E. K. Davis, by S. C. Davis, administratrix.	5,347	Apr. 8, 1873	436	{ 134 } { 135 }	{ 3 }	404
Loom, Lappet	F. W. Newton, by W. L. Pomeroy and J. F. Plummer, assignees, (mesne.)	5,365	Apr. 22, 1873	871	{ 276 } { 277 }	{ 3 }	419
Looms, Take-up for	C. Gahren, by M. Cohn, assignee.	5,706	Dec. 23, 1873	821	267	4	688
Lubricator	W. T. Garratt	5,328	Mar. 18, 1873	627	207	3	314
M.							
Malt-dryer	W. W. Hughes	5,602	Oct. 14, 1873	326	108	4	415
Match-sticks, Machine for making	F. Zaiss	5,548	Aug. 19, 1873	626	206	4	203
Matter, Composition of	G. F. J. Colburn, by W. M. Welling, assignee.	5,596	Oct. 14, 1873	321	.....	4	414
Mattress-stuffing	F. A. Lane, by self, S. S. Lane, and E. Kendall, assignees, (mesne.)	5,266	Feb. 4, 1873	216	67	3	144
Mattress-stuffing	F. A. Lane, by self, S. S. Lane, and E. Kendall, assignees, (mesne.)	5,379	Apr. 29, 1873	1,111	351	3	489
Meat curing and packing	I. Atkinson	5,410	May 13, 1873	463	.....	3	546
Medicine for lung and other diseases	W. Trinder	5,254	Jan. 21, 1873	651	.....	3	87
Middlings-purifier	E. N. Lacroix	5,711	Dec. 30, 1873	1,004	323	4	713
Middlings-purifier	E. P. Welch, by self, J. H. R. W., and H. P. Welch, and J. A. Maloney, assignees.	5,346	Apr. 1, 1873	229	70	3	375
Milk-can handle	H. W. Shepard	5,280	Feb. 11, 1873	453	147	3	175
Mold-boards, Chill for casting	J. Oliver	5,321	Mar. 11, 1873	412	136	3	287
Molding machine	H. B. Smith	5,535	Aug. 19, 1873	611	201	4	201
Motion, Apparatus for transmitting	A. H. Kennedy, by J. M. Segur, assignee, (mesne.)	5,476	July 1, 1873	204	68	4	25
Music-teaching apparatus	L. A. Seward	5,632	Oct. 28, 1873	741	247	4	469
N.							
Nail-extractor	G. J. Capewell	5,502	July 29, 1873	1,010	328	4	125
Nails, Machine for arranging	A. Knowlton, by J. Hill, trustee.	5,313	Mar. 4, 1873	214	71	3	262
Nitro-glycerine, Exploding	A. Nobel, by Atlantic Giant-Powder Co., assignees, (mesne.)	5,620	Oct. 21, 1873	525	175	4	441
Nitro-glycerine, Method of exploding	A. Nobel, by Atlantic Giant-Powder Co., assignees, (mesne.)	5,621	Oct. 21, 1873	527	175	4	441
O.							
Offal, entrails, flesh, &c., for preservation, manure, &c., Drying	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	5,611	Oct. 21, 1873	517	.....	4	440
Offal, flesh, entrails, &c., for preservation, manure, &c., Treating	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	5,610	Oct. 21, 1873	516	.....	4	440
Offal, flesh, &c., Manure from	W. Adamson and C. F. A. Simonin, by W. Adamson, assignee.	5,612	Oct. 21, 1873	517	.....	4	440
Offal-treating establishments, Process and apparatus for deodorizing and destroying the gases from	J. J. Storer	5,703	Dec. 23, 1873	817	267	4	687
Oil-can	J. G. Evenden	5,597	Oct. 14, 1873	322	107	4	414
Oil-can	J. G. Evenden	5,598	Oct. 14, 1873	322	107	4	414
Ordnance, Breech-loading	E. A. Sutcliffe	5,375	Apr. 22, 1873	887	279	3	462
Ore-washer for hydraulic mining	J. M. Allenwood, by R. R. Craig and J. Craig, assignees.	5,255	Jan. 28, 1873	840	271	3	115
Organ, Reed	R. Burdett	5,485	July 15, 1873	587	198	4	75
Oscillating steam-engine	A. Nittinger, jr	5,353	Apr. 15, 1873	653	205	3	433

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P.							
Packing for journals and other parts of machinery	C. A. Stevens, by J. D. Clift, assignee.	5,551	Aug. 26, 1873	809		4	230
Paint	D. R. Averill, by The Averill Chemical Paint Co., assignee.	5,695	Dec. 23, 1873	807	.....	4	686
Paint	F. W. Gerdes	5,669	Nov. 25, 1873	762	.....	4	575
Painting, Material for distemper	H. M. Johnston	5,510	July 29, 1873	1,019	.....	4	126
Paper-cutting machine	H. Law	5,503	July 29, 1873	1,011	{ 328 329 }	4	125
Paper-cutting machine	G. A. Walker, by W. G. Ely, assignee.	5,463	June 24, 1873	837	266	3	708
Paper, Die for cutting out ornamental forms of	A. Delkescamp, by J. J. Nichols, assignee.	5,635	Oct. 28, 1873	745	248	4	469
Paper-folding machine	C. Chambers, jr.	5,533	Aug. 12, 1873	402	131	4	175
Paper-folding machine	A. Washburn	5,516	July 29, 1873	1,024	332	4	127
Paper-washer	E. S. Hanna	5,422	May 20, 1873	706	222	3	578
Paste, Machine and process for making	G. G. Noah	5,289	Feb. 18, 1873	684	221	3	206
Pasteboard, Apparatus for manufacture of	H. L. Palmer, by E. W. O'Neill and M. Fitzgibbons, assignees.	5,471	July 1, 1873	199	66	4	24
Pavement, Concrete	G. Bassett, by T. G. Bassett, assignee.	5,586	Oct. 7, 1873	142	47	4	392
Pen and pencil case	C. H. Downes	5,518	Aug. 5, 1873	182	58	4	150
Pencil-case	W. S. Hicks	5,384	Apr. 29, 1873	1,115	352	3	489
Pencil-case, Ornamental	E. S. Johnson	5,469	July 1, 1873	197	66	4	24
Pencils, Machine for cutting lead	A. Warth, by E. Faber, assignee.	5,228	Jan. 7, 1873	217	70	3	24
Pencils, Machine for cutting off lead	P. Schrag and P. Hufeland, by E. Faber, assignee.	5,236	Jan. 14, 1873	436	138	3	55
Photographic negative, Varnish for coating	J. W. Morgeneier	5,618	Oct. 21, 1873	522	.....	4	441
Photographs, &c., Burnisher for	E. R. Weston, by T. McDonald, assignee.	5,281	Feb. 11, 1873	454	147	3	175
Piano, Upright	G. C. Manner	5,470	July 1, 1873	198	66	4	24
Pitman	F. R. Glasecock	5,600	Oct. 14, 1873	324	107	4	414
Planing-machines, Stock for holding cutters in	I. Gibbs	5,329	Mar. 18, 1873	627	207	3	314
Planter, Seed	B. Kuhns	5,542	Aug. 19, 1873	620	204	4	202
Plaster for walls	B. R. Smith and J. C. Harris	5,389	Apr. 29, 1873	1,121	.....	3	490
Plow	L. Gibbs, by self, J. R. Bucher, and W. A. Wikidal, assignees.	5,421	May 20, 1873	705	221	3	578
Plow	G. Shelton	5,530	Aug. 12, 1873	398	130	4	175
Plow, Cotton	Z. B. Sims	5,513	July 29, 1873	1,022	331	4	126
Portfolio	J. C. Koch	5,221	Jan. 7, 1873	212	68	3	23
Press	R. Esmond, by United Power-Press Company, assignee.	5,613	Oct. 21, 1873	518	174	4	440
Printing-press	G. W. Prouty	5,664	Nov. 18, 1873	567	192	4	547
Printing-press, Rotary	C. Montague, by C. C. Child, assignee.	5,501	July 22, 1873	794	260	4	101
Propeller, Operating screw	A. Lee	5,371	Apr. 22, 1873	882	278	3	462
Propeller, Screw	J. Montgomery	5,364	Apr. 22, 1873	870	275	3	461
Puddling-furnace	H. McDonald	5,500	July 22, 1873	793	260	4	101
Puddling iron and steel, Process and apparatus for	J. G. Blunt, by M. H. Insley, assignee.	5,367	Apr. 22, 1873	878	277	3	462
Pump	E. Graser	5,396	May 6, 1873	239	75	3	517
Pump	R. M. Lafferty, by self and E. P. Smith, assignees.	5,440	June 10, 1873	378	118	3	655
Pump	R. M. Lafferty, by self and E. P. Smith, assignees.	5,441	June 10, 1873	379	118	3	655
Pump, Oil-well	J. B. Root, by A. S. Hill, H. H. Noyes, and H. M. Haskell, assignees, (mesne.)	5,525	Aug. 5, 1873	193	61	4	151
Pump-rod attachment	H. H. Locke, by D. Bly, assignee.	5,543	Aug. 19, 1873	621	205	4	202
Pump, Steam-vacuum	W. Burdon	5,640	Nov. 4, 1873	173	58, 59	4	492
Pump, Steam-vacuum	W. Burdon	5,641	Nov. 4, 1873	174	59	4	493
Punch, Hand	A. S. Eckert, by W. F. Ebbs, assignee.	5,450	June 17, 1873	618	195	3	682
R.							
Railway-frog	J. Wood, by E. R. Bennett, assignee.	5,473	July 1, 1873	201	67	4	24
Railway-rail	A. McKenney	5,307	Mar. 4, 1873	209	69	3	262
Railway-rail joint, Nut-locking device for	A. McKenney	5,308	Mar. 4, 1873	210	69	3	262
Railway water-tank	J. Morton, by the McGowan Pump Company, assignee, (mesne.)	5,544	Aug. 19, 1873	622	205	4	202
Railway water-tank	J. Morton, by the McGowan Pump Company, assignee, (mesne.)	5,545	Aug. 19, 1873	623	205	4	203
Railways, Electric signaling-apparatus for	F. L. Pope, by self, S. C. Hendrickson, J. N. Ashley, and J. D. Lincoln, assignees.	5,622	Oct. 21, 1873	529	{ 175 176 }	4	441
Razor-strap	O. B. Howard, by O. P. Shepherd, assignee.	5,402	May 13, 1873	455	143	3	545
Rendering fats and deodorizing the gases, Apparatus for	H. S. Firman	5,643	Nov. 4, 1873	176	60	4	493
Revolving and tilting chair	D. E. Teal, by Heywood Brothers & Co., assignees.	5,345	Apr. 1, 1873	229	70	3	375
Rivet	J. E. Wootteer	5,567	Sept. 9, 1873	392	131	4	285
Riveting-tool	B. F. Cobb, by E. Prescott, assignee.	5,297	Feb. 25, 1873	894	287	3	235
Rock-drilling machine	S. W. Robinson and D. V. Wood	5,285	Feb. 18, 1873	679	220	3	206
Roving and spinning-frame flier	T. Mayor	5,295	Feb. 25, 1873	891	287	3	235
Rubber, gutta-percha, &c., Coating wood with	K. W. Holmes and A. Albright, by said Albright, assignee.	5,343	Apr. 1, 1873	226	.....	3	375
Rubber, Hard	A. G. Day	5,232	Jan. 14, 1873	432	137	3	54
Rubber, Manufacture of hard flexible	A. G. Day	5,231	Jan. 14, 1873	430	137	3	54
Rubber, Process of manufacturing hard	A. G. Day	5,230	Jan. 14, 1873	428	137	3	54

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Ga t e.	
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S.							
Sad and fluting iron.....	J. Hewitt.....	5,302	Mar. 4, 1873	203	67	3	261
Saddle-tree.....	S. E. Tompkins.....	5,495	July 15, 1873	597	291	4	76
Saddle tree, Side.....	J. Straus.....	5,609	Oct. 14, 1873	335	111	4	415
Salt and pepper dredge.....	D. C. Ripley.....	5,666	Nov. 18, 1873	569	193	4	548
Sash-holder.....	R. B. Hugunin.....	5,559	Sept. 2, 1873	202	65	4	258
Sash-holder for carriage-window.....	S. E. Totten, jr., by W. Bloodgood, assignee.	5,426	May 27, 1873	907	292	3	602
Sash-lock.....	G. McGregor and G. Voll, by W. A. Hopkins and F. Z. Dickenson, assignees, (mesne.)	5,253	Jan. 21, 1873	650	210	3	87
Saw-frame.....	D. and E. Moore, by Bissell & Moore Manufacturing Company, assignee.	5,674	Dec. 2, 1873	210	72	4	602
Saw-hanging.....	L. Morrison and A. G. Harms.....	5,646	Nov. 4, 1873	180	61	4	493
Saw-hanging.....	L. Morrison and A. G. Harms.....	5,647	Nov. 4, 1873	181	61	4	493
Saw-mill, Circular.....	L. C. Pattee.....	5,303	Mar. 4, 1873	204	68	3	261
Saws, Attaching handle to cross-cut.....	I. Pelham, by E. Andrews, assignee.	5,339	Mar. 25, 1873	850	278	3	343
Saws, Gate for gang for marble.....	L. B. Clogston, by C. H. Sheldon, assignee.	5,672	Dec. 2, 1873	208	71	4	602
Sawing-machine for edging lumber.....	E. Tarrant.....	5,336	Aug. 19, 1873	613	202	4	202
Scoop, Vegetable.....	J. F. Unglish, by J. E. Thompson, assignee.	5,675	Dec. 2, 1873	210	72	4	602
Screen and shutter, Window.....	B. J. Williams.....	5,527	Aug. 5, 1873	195	61	4	151
Screw-blanks, Machine for threading.....	E. Croft.....	5,673	Dec. 2, 1873	208	71	4	602
Screw machine, Wood.....	C. B. F. Tingley, by W. H. Haskell, assignee.	5,472	July 1, 1873	200	67	4	24
Seams for uniting material, Metallic.....	J. Keith, by A. B. Keith, trustee and assignee.	5,645	Nov. 4, 1873	180	60	4	493
Seed-dropper.....	F. W. Young.....	5,529	Aug. 5, 1873	196	62	4	151
Seed-separator.....	W. J. Walker.....	5,227	Jan. 7, 1873	217	70	3	24
Sewing-machine.....	W. C. Hicks.....	5,305	Mar. 4, 1873	205	68	3	262
Sewing-machine.....	G. Rehfuß, by American Button-hole Overseaming and Sewing-machine Co., assign'ee.	5,260	Jan. 28, 1873	845	{ 272 } { 273 }	{ 3 }	{ 115 }
Sewing-machine.....	E. H. Smith.....	5,388	Apr. 29, 1873	1,119	353	3	490
Sewing-machine extension-table.....	J. Bennor, by N. D. Storps and J. B. Myers, assignees, (mesne.)	5,667	Nov. 25, 1873	761	257	4	574
Sewing-machine for making button-holes.....	E. Howard and W. H. Jackson, by H. E. Townsend, C. P. Brigham, and G. W. Simmons, assignees, (mesne.)	5,336	Mar. 25, 1873	846	278	3	342
Sewing-machine for working button-holes.....	E. Howard and W. H. Jackson, by H. E. Townsend, C. P. Brigham, and G. W. Simmons, assignees, (mesne.)	5,306	Mar. 4, 1873	208	68, 69	3	262
Sewing-machine gage.....	C. C. Roberts.....	5,689	Dec. 16, 1873	615	201	4	659
Sewing-machine hemmer.....	E. Howell.....	5,414	May 20, 1873	697	219	3	577
Sewing-machine mechanical-movement.....	E. Cowles, by E. Holmes, assignee, (mesne.)	5,481	July 8, 1873	368	{ 124 } { 125 }	{ 4 }	{ 49 }
Sewing-machine ruffling-attachment.....	D. C. Carey, by W. G. Wilson, assignee.	5,368	Apr. 22, 1873	879	278	3	462
Sewing-machine shuttle.....	G. A. Edwards and G. Schieder.....	5,342	Apr. 1, 1873	226	69	3	375
Sewing-machine shuttle.....	G. A. Edwards and G. Schieder.....	5,436	June 3, 1873	185	60	3	624
Sewing-machine treadle.....	S. B. Bushfield, by self, R. D. Morrison, J. H. Warner, and W. L. Stork, assignees, (mesne.)	5,595	Oct. 14, 1873	320	106	4	414
Sewing-machine tucker.....	J. H. Bean, by F. W. Brown, assignee.	5,427	May 27, 1873	908	292	3	602
Sewing-machine, Wax-thread.....	E. E. Bean, by Shoe Machinery Manufacturing Company, assignee, (mesne.)	5,423	May 27, 1873	903	291	3	602
Shade-fixture.....	S. Hartshorn.....	5,558	Sept. 2, 1873	201	65	4	258
Sheep, Device for shearing.....	A. J. Fullam, by W. Earl, jr., J. G. Blunt, R. T. Smith, and J. K. Priest, assignees.	5,701	Dec. 23, 1873	815	266	4	687
Sheep-shearing machine.....	A. H. Kennedy, by J. M. Segur, assignee, (mesne.)	5,477	July 1, 1873	205	68	4	25
Sheet-iron, Manufacture of.....	W. D. Wood.....	5,474	July 1, 1873	202	.....	4	25
Sheet-metal can.....	J. G. Evenden.....	5,599	Oct. 14, 1873	323	107	4	414
Sheet-metal ware, Die for forming.....	M. Bray.....	5,257	Jan. 28, 1873	842	271	3	115
Show-case, Thread.....	A. Steward.....	5,526	Aug. 5, 1873	194	61	4	151
Shutter-fastening.....	B. D. Washburn.....	5,625	Oct. 21, 1873	535	176	4	442
Sifter, Flour.....	L. S. Nourse, by H. A. Hildreth and W. J. Johnson, assignees.	5,248	Jan. 21, 1873	644	209	3	87
Skate.....	J. Forbes.....	5,660	Nov. 18, 1873	563	191	4	547
Skate.....	J. Forbes.....	5,705	Dec. 23, 1873	820	267	4	687
Skate, Roller.....	W. P. Gregg.....	5,207	Dec. 23, 1873	822	268	4	688
Skylight.....	G. Hayes.....	5,650	Nov. 11, 1873	363	123	4	519
Skylight.....	G. Hayes.....	5,693	Dec. 23, 1873	805	264	4	687
Slate-frames, Machine for dressing the edge of.....	J. W. Sayre and A. S. Shull, by H. W. Harper, assignee.	5,322	Mar. 11, 1873	413	136	3	287
Slotting-machines, Tool-holder for.....	J. S. Ettenborough.....	5,277	Feb. 11, 1873	450	146	3	174
Smelting furnace, Iron and other ore.....	S. W. Harris, by B. Ray, M. Martin, and J. W. Hoysradt, assignees.	5,397	May 6, 1873	240	75	3	517
Smoothing and fluting iron.....	J. Hewitt.....	5,357	Apr. 15, 1873	657	206	3	435
Smoothing and fluting iron.....	J. Hewitt.....	5,437	June 3, 1873	186	60	3	624
Snap-hook.....	C. B. Bristol.....	5,639	Nov. 4, 1873	173	58	4	492
Snap-hook, Whiffletree.....	C. W. Saladee.....	5,399	May 6, 1873	243	75	3	517
Snow and ice from roadway, Machine for removing.....	M. C. Bogia.....	5,697	Dec. 23, 1873	813	265	4	687
Soldering-apparatus.....	J. Gulden.....	5,362	Apr. 22, 1873	868	275	3	461

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Invention or discovery.	Name of patentee.	No.	Date.	Monthly volume.		Official Gazette.	
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Sole edge-trimming machine, Boot and shoe	R. C. Lambert, by The Shoe Machinery Manufacturing Company, assignee, (mesne.)	5,661	Nov. 18, 1873	564	191	4	547
Soles of boots and shoes, Machine for channeling.....	M. Wesson, by G. McKay, assignee.	5,561	Sept. 2, 1873	205	66	4	258
Spark-arrester for locomotive-engine.....	W. M. Thornton and T. A. Buckland.	5,687	Dec. 16, 1873	612	{ 200 201 }	{ 4 4 }	{ 659 367 }
Speaking-tube	J. R. Creighton, by O. B. Hall, 2d assignee.	5,580	Sept. 30, 1873	946	320	4	367
Speaking-tube	C. A. Fredericks.....	5,588	Oct. 7, 1873	144	48	4	392
Spinning-machine spindle.....	B. H. Jenks.....	5,521	Aug. 5, 1873	186	59	4	150
Spinning-ring	W. Jenckes, by G. Draper & Son, assignees.	5,702	Dec. 23, 1873	816	266	4	687
Spittoon	W. H. Topham.....	5,514	July 29, 1873	1,022	331	4	126
Spoon and fork handle, Design for.....	E. C. Moore, by Tiffany & Co., assignees.	5,573	Sept. 16, 1873	582	196	4	312
Spring	F. K. John.....	5,685	Dec. 16, 1873	610	200	4	659
Squares, Machine for graduating carpenters'.....	H. K. Jones, by Hart, Bliven & Mead Manufacturing Company, assignees.	5,408	May 13, 1873	461	145	3	546
Stamp, Hand.....	H. Holt, by Secombe Manufacturing Company, assignee, (mesne.)	5,555	Aug. 26, 1873	849	280	4	230
Stalk-cutter.....	T. A. Galt and G. S. Tracy.....	5,233	Jan. 14, 1873	434	138	3	54
Stave crozing and chamfering machine.....	H. Wilde, by E. and B. Holmes, assignees.	5,626	Oct. 21, 1873	536	177	4	442
Steam-boiler and furnace	G. W. Lascell, by self and H. Robinson, assignees.	5,398	May 6, 1873	241	75	3	517
Steam-gage	T. W. Lane.....	5,320	Mar. 11, 1873	410	{ 135 136 }	{ 3 3 }	{ 287 87 }
Steam-gage, Recording.....	D. P. Davis, by G. J. Hunter, assignee.	5,252	Jan. 21, 1873	648	210	3	87
Steam-generator	J. B. Root, by T. C. M. Paton, assignee, (mesne.)	5,524	Aug. 5, 1873	191	60	4	151
Steam-power brake-device	G. Westinghouse, jr.....	5,504	July 29, 1873	1,012	329	4	125
Steam-trap.....	J. H. Blessing, by self and F. Townsend, assignees.	5,549	Aug. 26, 1873	835	278	4	230
Steel-casting, Manufacture of.....	W. Kelly, by T. C. Coleman, assignee.	5,636	Oct. 28, 1873	747	248	4	469
Steel mold and core for casting.....	W. Kelly, by T. C. Coleman, assignee.	5,637	Oct. 28, 1873	748	248	4	469
Stench traps, Casting	J. E. White, by L. A. Cauvet, assignee.	5,291	Feb. 18, 1873	686	221	3	206
Stippling metallic surfaces, Process and apparatus for.....	R. Dimes, by Tiffany & Co., assignees.	5,378	Apr. 29, 1873	1,110	351	3	489
Stove	J. G. Widmann.....	5,605	Oct. 14, 1873	330	109	4	415
Stove	E. Smith.....	5,709	Dec. 30, 1873	1,000	322	4	713
Stove, Base-burning.....	J. Easterly, by J. S. Perry, trustee, and N. B. Perry, assignees.	5,498	July 22, 1873	791	259	4	100
Stove, Base-burning.....	J. Spear.....	5,459	June 17, 1873	629	197	3	683
Stove, Base-burning.....	J. Spear.....	5,460	June 17, 1873	630	197	3	683
Stove, Coal-oil.....	J. H. Thorp.....	5,418	Mar. 20, 1873	701	320	3	578
Stove, Cooking.....	J. Easterly.....	5,627	Oct. 28, 1873	736	246	4	468
Stove, Cooking.....	R. M. Hermance, by J. B. Wilkinson, assignee, (mesne.)	5,554	Aug. 26, 1873	844	{ 279 280 }	{ 4 4 }	{ 230 368 }
Stove, Cooking.....	G. H. Phillips.....	5,583	Sept. 30, 1873	950	321	4	368
Stove-door	D. N. Martin, by D. N. and C. M. Martin, assignees.	5,405	May 13, 1873	457	144	3	545
Stove, Heating..... (Design)	E. Mingay.....	5,712	Dec. 30, 1873	1,006	.....	4	713
Stove, Heating.....	J. Spear.....	5,314	Mar. 4, 1873	216	71	3	263
Stove, Reservoir.....	H. F. T. Hale.....	5,369	Apr. 22, 1873	880	278	3	462
Stove, Reservoir cooking.....	E. Bussey, by C. A. McLeod, assignee.	5,435	June 3, 1873	183	59, 60	3	624
Stove, Reservoir cooking.....	G. G. Wolfe.....	5,442	June 10, 1873	380	118	3	655
Strap-machine	A. F. Stowe.....	5,462	June 24, 1873	836	265	3	708
Street-sprinkler.....	L. F. Bancroft, by E. E. Quimby, trustee and assignee, (mesne.)	5,325	Mar. 18, 1873	623	206	3	314
Suspender	T. O. Potter and J. W. Smith, by Bay State Suspender Company, assignee.	5,593	Oct. 7, 1873	148	49	4	392
T.							
Tablet platform or mat, Non-conducting	H. L. Palmer, by C. C. Skilton, assignee.	5,562	Sept. 2, 1873	206	67	4	258
Tea-kettle spout	J. Ash.....	5,537	Aug. 19, 1873	614	202	4	202
Telegraph-apparatus, Duplex	J. B. Stearns, by Western Union Telegraph Company, assignee.	5,344	Apr. 1, 1873	227	69	3	375
Telegraph, Printing.....	T. A. Edison, by The Gold Stock Telegraph Company, assignee, (mesne.)	5,519	Aug. 5, 1873	183	58, 59	4	150
Telegraph, Printing.....	G. Little.....	5,267	Feb. 4, 1873	216	67	3	144
Telegraph, Printing.....	F. L. Pope and T. A. Edison, by The Gold Stock Telegraph Company, assignee, (mesne.)	5,523	Aug. 5, 1873	187	60	4	150
Thrashers' rewinnowing attachment	J. B. Padon.....	5,438	June 3, 1873	187	60	3	624
Thrashing and hulling clover, Machine for	J. Bradley and J. Nicholas.....	5,634	Oct. 28, 1873	744	247	4	469
Thrashing-machine	D. C. Baughman.....	5,217	Jan. 7, 1873	206	67	3	23
Tile-dressing machine.....	G. and V. G. Barney.....	5,468	July 1, 1873	195	65, 66	4	24
Till-alarm	C. and W. H. Tucker, by N. Tucker and R. S. Dorsey, assignees, (mesne.)	5,566	Sept. 9, 1873	391	130	4	285
Tilting-chair.....	M. V. Howe, by Heywood Brothers & Co., assignees.	5,419	May 20, 1873	703	{ 220 221 }	{ 3 3 }	{ 578 546 }
Tire-bending machine.....	J. Tomlinson.....	5,409	May 13, 1873	462	145	3	546
Tire-setter.....	J. Pailca.....	5,565	Sept. 9, 1873	390	130	4	285

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Tournure	A. W. Thomas	5,563	Sept. 2, 1873	207	67	4	258
Toy	C. Ball, by T. Marriott, assignee.	5,479	July 8, 1873	367	124	4	49
Traveling-bag	A. Sonnekalb and J. W. Lieb, by { said Lieb, assignee.	5,299	Feb. 25, 1873	895	{ 287 288	{ 3 3	235
Treadle	G. B. Kirkham	5,385	Apr. 29, 1873	1,116	352	3	489
Trimmings, Machine for producing folded	C. O. Crosby and H. Kellogg, by { Elm City Company, assignee.	5,448	June 17, 1873	613	{ 193 194	{ 3 3	682
Truck, Car	A. Higley, by Higley Car Jour- nal Company, assignee.	5,452	June 17, 1873	620	195	3	682
Truck, Changeable-gage car	C. D. Tisdale	5,382	Apr. 29, 1873	1,113	352	3	489
Trunk-lock hasp	C. Liebrich, by L. Hillebrand and D. Wolf, assignees, (mesne.)	5,352	Apr. 15, 1873	652	205	3	435
Tubing, Machine for bending	W. T. Farre	5,581	Sept. 30, 1873	947	320	4	368
Tubing, Method of bending	W. T. Farre	5,582	Sept. 30, 1873	949	321	4	368
Tug-holder	T. J. Bottomley, by Pratt & Letchworth, assignees.	5,657	Nov. 18, 1873	561	190	4	547
Turn-table for railways	W. Sellers	5,373	Apr. 22, 1873	883	279	3	462
U.							
Umbrella-frame runner and notch	A. Herzberg, by I. Herzberg, assignee.	5,234	Jan. 14, 1873	435	138	3	54
Umbrella-runner	O. M. Smith	5,478	July 1, 1873	206	68	4	25
V.							
Valve, Flexible lip-formed	E. Field	5,431	June 3, 1873	177	58	3	623
Valve for steam-engines, Slide	J. Nesbitt, by W. G. Ulery, as- signee.	5,310	Mar. 4, 1873	212	70	3	262
Valve for water-pipes	W. Kearney	5,220	Jan. 7, 1873	211	68	3	23
Valve, Slide	J. Nesbitt, by W. G. Ulery, as- signee.	5,309	Mar. 4, 1873	211	70	3	262
Vault-cover, Illuminating	W. Dale, by W. S. O. Brien, as- signee.	5,684	Dec. 16, 1873	609	199	4	659
Vehicle lubricating-axle	J. S. Eggleston, by E. H. Kel- logg, assignee.	5,466	June 24, 1873	841	266	3	709
Vehicle-seat	J. Burt, by A. F. Hubbell and E. R. Williams, assignees, (mesne.)	5,446	June 17, 1873	612	193	3	681
Vehicle-wheel	A. L. Blackman, by S. K. Schwenk and J. E. Saunders, assignees.	5,264	Jan. 28, 1873	850	274	3	116
Vehicle-wheel	L. Dorman, by C. W. Fillmore and J. R. Miner, assignees.	5,509	July 29, 1873	1,018	330	4	126
Vehicles, Car-spring for	C. W. Saladee, by L. Dobbins, assignee.	5,359	Apr. 15, 1873	659	207	3	435
Ventilator	S. C. Maine, by Maine's Portable Ventilator Company, as- signee, (mesne.)	5,363	Apr. 22, 1873	869	275	3	461
Vise	H. K. and T. W. Porter, by C. Parker, assignee, (mesne.)	5,653	Nov. 11, 1873	366	123	4	519
Vise	G. N. Stearns	5,574	Sept. 16, 1873	583	197	4	312
W.							
Wagon-spring	E. P. McCarthy, by self and J. B. Grant, assignees.	5,615	Oct. 21, 1873	520	174	4	441
Wagon-top	A. R. Tully	5,467	June 24, 1873	842	267	3	709
Wash-boiler	J. Davis	5,350	Apr. 15, 1873	648	204	3	434
Water-elevator, Steam	W. E. Prall	5,715	Dec. 30, 1873	1,009	324	4	714
Water-wheel	J. P. Collins	5,407	May 13, 1873	459	145	3	545
Water-wheel	J. E. Stevenson	5,341	Mar. 25, 1873	854	{ 279 280	{ 3 3	343
Water-wheel	J. Taney	5,682	Dec. 9, 1873	396	130	4	629
Water-wheel and sewing-machine, Combined	I. Hyde, by O. J. Backus, assignee	5,590	Oct. 7, 1873	145	48	4	392
Weaver's harness, Machine for making	J. S. Winsor, by L. A. Cook and J. Kendrick, assignees, (mesne.)	5,282	Feb. 11, 1873	455	148	3	175
Weighing machine, Grain	F. S. McWhorter	5,337	Mar. 25, 1873	848	278	3	342
Well-tube	S. H. Dickerson	5,507	July 29, 1873	1,017	330	4	126
Wells, Device for steaming oil	T. B. Carothers	5,659	Nov. 18, 1873	562	191	4	547
Wells, Grab-tool for oil	J. H. Luther	5,386	Apr. 29, 1873	1,118	353	3	489
Wells, Increasing capacity of oil	E. A. L. Roberts	5,434	June 3, 1873	181	59	3	623
Wells, Mode of constructing	A. Curtis	5,677	Dec. 9, 1873	390	128	4	629
Wheat and other grain for food, Preparing	R. B. Fitts, by The Nutrio Manu- facturing Company, assignee, (mesne.)	5,654	Nov. 11, 1873	367	.....	4	519
Wheat, corn, and other grain for food, Preparing	R. B. Fitts, by The Nutrio Manu- facturing Company, assignee, (mesne.)	5,655	Nov. 11, 1873	368	.....	4	519
Whip-socket	S. W. Beach	5,272	Feb. 11, 1873	445	145	3	174
Whip socket	C. B. Morehouse, by E. Cham- berlin and J. O. Merriam, as- signees, (mesne.)	5,235	Jan. 14, 1873	435	138	3	55
Whip-socket	E. W. Scott, by self and A. Searls, assignees.	5,400	May 6, 1873	244	76	3	517
Whip-socket to vehicles, Device for clamping	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	5,698	Dec. 23, 1873	814	265	4	687
Whip-socket to vehicles, Device for clamping	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	5,699	Dec. 23, 1873	814	265	4	687
Whip-socket to vehicles, Device for clamping	C. B. Morehouse, by E. Cham- berlin and J. O. Merriam, as- signees, (mesne.)	5,713	Dec. 30, 1873	1,007	324	4	713
Whip-socket to vehicles, Device for coupling	E. Chamberlin, by self and J. O. Merriam, assignees, (mesne.)	5,700	Dec. 23, 1873	815	266	4	687
Whip-stock, Manufacture of	D. C. Hull	5,651	Nov. 11, 1873	365	123	4	519
Windlasses, Method of operating	P. Philip	5,304	Mar. 4, 1873	205	68	3	262

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Windmill	M. Crossman and P. A. Spicer ..	5, 692	Dec. 23, 1873	803	263	4	686
Windmill	W. I. Tustin	5, 354	Apr. 15, 1873	654	205	3	435
Windmill	L. H. Wheeler, by H. W. Wheeler, executrix, and W. H. Wheeler, assignee.	5, 531	Aug. 12, 1873	399	130	4	175
Window-button	A. D. Judd	5, 370	Apr. 22, 1873	881	278	3	462
Window-shades, Tassel-clip for	F. Müller	5, 338	Mar. 25, 1873	850	278	3	342
Wood, Process of transferring the grain-marks of	J. R. Cross, by self and A. J. Bastine, assignees.	5, 377	Apr. 29, 1873	1, 110	351	3	488
Wrench	L. Jordan and L. E. Smith, by Collins Company, assignee.	5, 294	Feb. 25, 1873	890	286	3	235
Wringing-machine	H. Glass, by Bailey Washing and Wringing Machine Company, assignee, (mesne.)	5, 265	Feb. 4, 1873	215	67	3	144
Z.							
Zinc from gold and silver, Separating	E. Balbach, jr	5, 461	June 24, 1873	835	265	3	708

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A.					
Advertising, Mode of.....	E. Wiebé.....	26, 136	Nov. 15, 1859	4	504
Animal-trap.....	A. S. Blake.....	23, 750	Apr. 26, 1859	3	444
Auger, Hollow.....	A. Wyckoff.....	24, 773	July 12, 1859	4	36
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B.					
Bakers' oven.....	G. C. Jennison.....	22, 809	Feb. 1, 1859	3	100
Bale-band, Metallic.....	G. Brodie.....	23, 291	Mar. 22, 1859	3	296
Barrel crozing and chamfering machine.....	H. Littlejohn.....	23, 097	Mar. 1, 1859	3	218
Bed-bottom.....	B. F. S. Monroe.....	22, 742	Jan. 25, 1859	3	70
Bedstead-fastening.....	L. H. Buxton.....	23, 525	Apr. 5, 1859	3	325
Bedstead-slat.....	T. Howe.....	25, 569	Sept. 27, 1859	4	322
Belting, Making rubber.....	D. C. Gately.....	26, 177	Nov. 22, 1859	4	531
Belting, Rubber.....	D. C. Gately.....	26, 178	Nov. 22, 1859	4	531
Blind-rods, Hand-machine for wiring.....	B. C. Davis.....	25, 726	Oct. 11, 1859	4	379
Blind-stile boring or mortising machine.....	L. Worcester.....	24, 688	July 5, 1859	4	7
Boiler furnace, Steam.....	J. Amory.....	23, 650	Apr. 19, 1859	3	415
Boot and shoe tip.....	N. Silverthorn.....	26, 329	Nov. 29, 1859	4	558
Bottle, Nursing.....	F. J. La Forme.....	26, 327	Nov. 29, 1859	4	557
Bottle-stopper fastening.....	H. W. Putnam.....	23, 263	Mar. 15, 1859	3	244
Box-joints, Machine for making.....	J. Simpson.....	26, 060	Nov. 8, 1859	4	504
Brace-bit.....	N. Spofford.....	25, 984	Nov. 1, 1859	4	452
Bronzing-machine.....	G. H. Babcock.....	25, 874	Oct. 25, 1859	4	425
Burglar-alarm.....	A. Q. Ross.....	25, 586	Sept. 27, 1859	4	322
Burnishing-machine.....	L. S. White.....	23, 520	Apr. 5, 1859	3	325
(Reissue 4,783)					
(Reissue 3,405)					
(Reissues 1,339, 3,070)					
(Reissue 2,831)					
(Reissue 1,606)					
(Reissue 2,576)					
C.					
Cakes, Cutting and panning.....	J. H. Shrote.....	25, 767	Oct. 11, 1859	4	379
Canal-lock gate.....	C. W. Williams.....	23, 635	Apr. 12, 1859	3	386
Cane-grinding mill.....	I. A. Hedges.....	22, 802	Feb. 1, 1859	3	70
Car, Body-bolster for railway.....	A. Ward.....	24, 512	June 21, 1859	3	662
Car couches, Arranging railway.....	E. C. Knight.....	24, 563	June 28, 1859	3	690
Car-couches, Mode of arranging.....	E. C. Knight.....	25, 570	Sept. 27, 1859	4	322
Car roof, Railway.....	A. P. Winslow.....	25, 070	Aug. 9, 1859	4	135
Car seat and couch.....	T. T. Woodruff.....	24, 257	May 31, 1859	3	585
Car seat, Railway.....	E. Wheeler.....	25, 499	Sept. 20, 1859	4	295
Car, Sleeping.....	J. Danner.....	25, 814	Oct. 18, 1859	4	400
Car-spring.....	A. B. Davis.....	22, 941	Feb. 15, 1859	3	156
Carpet-sweeper.....	N. B. Pratt.....	22, 890	Feb. 8, 1859	3	100
Carriage-top prop.....	G. Cook and H. I. Kimball.....	26, 564	Dec. 27, 1859	4	670
Casting, Molding for metal.....	J. P. Broadmeadow.....	26, 321	Nov. 29, 1859	4	557
Clock-dial.....	S. E. Root.....	23, 950	May 10, 1859	3	497
Clothes-drier.....	B. B. Hawse.....	26, 674	Jan. 3, 1860	4	698
Clothes-pins, Machine for wiring the joints of.....	A. C. Mason.....	25, 344	Sept. 6, 1859	4	240
Cock, Try.....	J. F. Cook.....	25, 544	Sept. 20, 1859	4	296
Cock, Water-closet.....	D. Wellington.....	26, 145	Nov. 15, 1859	4	504
Coffin, Sheet-metal.....	I. C. Shuler.....	24, 635	July 5, 1859	4	7
Collar and cuff, Ladies'.....	W. E. Lockwood.....	23, 771	Apr. 26, 1859	3	444
Collar and cuff, Ladies'.....	W. E. Lockwood.....	23, 771	Apr. 26, 1859	3	444
Collar and cuff, Ladies'.....	W. E. Lockwood.....	23, 771	Apr. 26, 1859	3	444
Corrugating sheet-metal.....	W. E. Worthen and H. B. Renwick.....	24, 689	July 5, 1859	4	7
Corrugating sheet-metal, Machine for.....	J. Wilson, C. Green, and W. Wilson, jr.....	23, 736	Apr. 19, 1859	3	416
Cotton-scraper.....	J. H. Mitchell.....	25, 434	Sept. 13, 1859	4	270
Cracker-machine.....	J. Fox.....	22, 793	Feb. 1, 1859	3	324
Cultivator.....	M. Alden.....	23, 886	May 10, 1859	3	497
Cultivator.....	T. McQuiston.....	25, 843	Oct. 18, 1859	4	400
Cultivator.....	R. M. Melton.....	24, 227	May 31, 1859	3	585
Cut-off valve, Steam-engine.....	E. R. Arnold.....	25, 936	Nov. 1, 1859	4	452
Cylinders, Casting copper.....	F. Adams.....	24, 915	Aug. 2, 1859	4	85
D.					
Drain-pipe, Machine for making.....	B. S. and M. R. Pierce.....	23, 703	Apr. 19, 1859	3	416
(Reissues 1,897, 2,841, 3,413)					
E.					
Elevator for warehouses, factories, mines, &c.....	A. Betteley.....	24, 923	Aug. 2, 1859	4	85
Elevator or hoisting apparatus for hotels, &c.....	O. Tufts.....	25, 061	Aug. 9, 1859	4	108
Emery wheels and sticks, Manufacture of.....	T. J. Mayall.....	22, 606	Jan. 11, 1859	3	7
Emery with caoutchouc, Combining.....	T. J. Mayall.....	25, 747	Oct. 11, 1859	4	379
Envelope.....	S. E. Pettee.....	23, 309	Mar. 22, 1859	3	297
F:					
Fabrics, Machine for rolling.....	T. H. Murphy.....	24, 046	May 17, 1859	3	527
Felt fabric, Machinery for disintegrating waste.....	J. F. Greene.....	23, 643	Apr. 12, 1859	3	386
Felted fabric, Obtaining fiber from waste.....	J. F. Greene.....	23, 642	Apr. 12, 1859	3	386
Fence, Ornamental connection for iron.....	H. Jenkins.....	8, 654	Jan. 13, 1852	3	386
Fire-alarm apparatus, Electro-magnetic.....	M. G. Farmer.....	23, 060	Feb. 22, 1859	3	218
Fire-arm, Breech-loading.....	B. Burton.....	26, 475	Dec. 20, 1859	4	640
Fire-arm, Many-barreled.....	C. Sharps.....	22, 753	Jan. 25, 1859	3	70
Fire, Composition for kindling.....	E. Bellinger.....	26, 408	Dec. 13, 1859	4	614
(Reissue 5,629)					
(Reissue 2,086)					
(Reissue 807)					
(Reissue 3,770)					
(Reissues 1,199, 2,420) (Division A)					
(Reissue 2,326)					

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Fire-plug.....(Reissues 1,026, 5,017) ..	J. L. Lowry	23, 034	Feb. 22, 1859	3	156
Fishing-reel	W. Billingham	24, 987	Aug. 9, 1859	4	108
Flour-packer.....(Reissue 4,626) ..	S. Taggart	24, 963	Aug. 2, 1859	4	84
Friction-coupling, Double	J. Hendy	25, 733	Oct. 11, 1859	4	379
Furnace boiler and steamer, Portable	D. R. Prindle	25, 442	Sept. 13, 1859	4	270
Furnace-door frame.....(Reissues 864, 5,095) ..	P. A. Sabbaton	24, 493	June 21, 1859	3	662
G.					
Gas, Apparatus for manufacture of	L. D. Gale	26, 030	Nov. 8, 1859	4	504
Gas-lighting by electricity.....(Reissue 3,873) ..	A. Wilson	25, 167	Aug. 16, 1859	4	159
Gas-pipe cutter.....(Reissue 5,335) ..	J. E. Stanwood	23, 792	Apr. 26, 1859	3	444
Gas-regulator.....(Reissue 5,335) ..	E. H. Covell	24, 199	May 31, 1859	3	585
Gas-retort.....(Reissues 864, 5,095) ..	W. Beaumont	24, 531	June 28, 1859	3	690
Grain-separator	J. L. Booth	25, 484	Sept. 20, 1859	4	295
H.					
Hammer, Trip.....(Reissue 4,699) ..	B. Hotchkiss	24, 428	June 14, 1859	3	640
Harness saddle-tree.....(Reissue 4,699) ..	S. E. Tompkins and J. Maclure ..	22, 841	Feb. 1, 1859	3	70
Harvester	E. Ball	25, 797	Oct. 18, 1859	4	400
Harvester	J. Gore	26, 582	Dec. 27, 1859	4	670
Harvester	L. and J. Miller	24, 700	July 5, 1859	4	6
Harvester	W. K. Miller	22, 885	Feb. 8, 1859	3	100
Harvester	W. K. Miller	22, 885	Feb. 8, 1859	3	100
Harvester	W. K. Miller	22, 885	Feb. 8, 1859	3	100
Harvester	W. K. Miller	22, 885	Feb. 8, 1859	3	100
Harvester	W. K. Miller	22, 885	Feb. 8, 1859	3	100
Harvester	W. K. Miller	22, 885	Feb. 8, 1859	3	100
Harvester.....(Reissues 2,230, 4,824.) (Division A) ..	S. Ray and M. R. Shalters ..	23, 707	Apr. 19, 1859	3	416
Harvester.....(Reissues 2,230, 4,826.) (Division C) ..	S. Ray and M. R. Shalters ..	23, 707	Apr. 19, 1859	3	416
Harvester.....(Reissues 2,230, 4,826.) (Division C) ..	I. S. and H. R. Russell	23, 399	Mar. 29, 1859	3	527
Harvester-rake	M. Young, jr.	24, 598	June 28, 1859	4	6
Harvesting-machine	M. G. Hubbard	23, 921	May 10, 1859	3	497
Hay-rake, Horse	S. Lessig	26, 599	Dec. 27, 1859	4	671
Hay-spreader.....(Reissue 3,481) ..	J. C. Stoddard	24, 588	June 28, 1859	3	690
Heel for boot and shoe.....(Reissue 3,481) ..	S. Dodge, jr., and B. Potter, jr. .	25, 395	Sept. 13, 1859	4	270
Hem-folder	L. Clark	25, 807	Oct. 18, 1859	4	400
Hoe, Weeding	J. M. Adams	25, 862	Oct. 18, 1859	4	401
Horseshoe-iron, Machine for rolling	W. W. Lewis	22, 812	Feb. 1, 1859	3	156
Hose, Manufacture of India-rubber.....(Reissue 5,111) ..	T. J. Mayall	26, 276	Nov. 29, 1859	4	557
Hose-tubing, Elastic.....(Reissue 5,111) ..	J. C. Boyd	25, 239	Aug. 30, 1859	4	240
Hydrant	C. L. Stacy	25, 683	Oct. 4, 1859	4	353
Hydro-carbon vapor apparatus.....(Reissue 1,985) ..	E. H. Covell	24, 200	May 31, 1859	3	585
I.					
Iron articles, Protecting surfaces of.....(Reissue 1,985) ..	T. Selleck	24, 665	July 5, 1859	4	7
Iron, Manufacture of	B. Lauth	25, 235	Aug. 23, 1859	4	135
J.					
Jacquard machine.....(Reissue 1,985) ..	A. Babbett	25, 796	Oct. 18, 1859	4	400
Jewelry, Rolling metal for	J. S. Palmer	24, 432	June 14, 1859	3	640
Journal-box.....(Reissue 1,985) ..	J. A. Montgomery	24, 947	Aug. 2, 1859	4	108
Journal-box, Saw-mill.....(Reissue 1,985) ..	W. M. Ferry, jr.	26, 262	Nov. 29, 1859	4	557
K.					
Kettle, Brass.....(Extended seven years. Reissues 2,171 3,996. Extended by act of Congress March 3, 1873.) (Division B.)	H. W. Hayden	8, 589	Dec. 16, 1851	3	272
Kettles, Machine for making.....(Extended seven years. Reissues 2,171, 3,995. Extended by act of Congress March 3, 1873.) (Division A.)	H. W. Hayden	8, 589	Dec. 16, 1851	3	271
L.					
Lamp.....(Reissues 4,413, 4,660) ..	E. J. Hale and C. H. Chandler ..	23, 085	Mar. 1, 1859	3	189
Lamp.....(Reissues 4,413, 4,660) ..	H. Halvorson	25, 506	Sept. 20, 1859	4	295
Lamp-holder.....(Reissue 1,025) ..	C. Monson	22, 664	Jan. 18, 1859	3	37
Lamp-shade.....(Reissue 1,025) ..	C. and A. C. Wilhelm	23, 875	May 3, 1859	3	470
Lasting boots and shoes, Machine for	J. Purington, jr.	25, 673	Oct. 4, 1859	4	353
Lathe-attachment for cutting veneers.....(Reissue 1,382) ..	B. F. Sturtevant	26, 627	Dec. 27, 1859	4	671
Lathe for turning irregular forms.....(Reissue 1,382) ..	C. and A. Spring	23, 957	May 10, 1859	3	497
Loom picker-motion, Power	W. Stearns	24, 668	July 5, 1859	4	7
M.					
Mail-bag.....(Reissues 3,192, 3,215, 3,682) ..	T. J. Lamden	23, 924	May 10, 1859	3	497
Meat-cutter.....(Reissues 3,192, 3,215, 3,682) ..	J. G. Perry	24, 953	Aug. 2, 1859	4	85
Meat-mincer.....(Reissues 3,192, 3,215, 3,682) ..	A. W. Hale	23, 246	Mar. 15, 1859	3	244
Mop-head.....(Reissues 3,192, 3,215, 3,682) ..	L. Taylor	22, 990	Feb. 15, 1859	3	127
N.					
Nail-machine	D. Dodge	25, 183	Aug. 23, 1859	4	185
Nail-machine	D. Dodge	25, 309	Aug. 30, 1859	4	213
Nut-making machine.....(Reissue 2,434) ..	W. E. Ward	15, 861	Oct. 7, 1856	4	35
Nut-making machine.....(Reissue 2,434) ..	W. E. Ward	15, 861	Oct. 7, 1856	4	270
O.					
Ore-separator.....(Reissue 2,434) ..	W. O. Bourne	24, 367	June 14, 1859	3	640
P.					
Pail, &c., Metallic ear for attaching handle to.....(Reissue 3,063) ..	T. Evans	24, 451	June 21, 1859	3	662
Paint-can.....(Reissue 3,063) ..	J. W. Masury	24, 748	July 12, 1859	4	35

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Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Paper-bags, Machine for making.....	W. Goodale.....	24,734	July 12, 1859	4	35
Paper-bags, Machine for making.....	W. Goodale.....	25,191	Aug. 23, 1859	4	185
Paper-boxes, Machine for making..... (Reissue 3,985) ..	S. B. Terry.....	25,373	Sept. 6, 1859	4	240
Paper-folding machine.....	C. Chambers, jr.....	23,445	Apr. 5, 1859	3	325
Paper-folding machine..... (Reissue 5,533) ..	C. Chambers, jr.....	26,090	Nov. 15, 1859	4	504
Paper-pulp, Apparatus for manufacture of..... (Reissues 996, 2,730) ..	J. B. Palser and G. Howland.....	24,484	June 21, 1859	3	662
Paper-pulp, Manufacture of..... (Reissues 996, 2,731) ..	J. B. Palser and G. Howland.....	24,484	June 21, 1859	3	662
Paper-pulp, Preparation of straw for..... (Reissues 997, 1,590) ..	J. B. Palser and G. Howland.....	24,484	June 21, 1859	3	662
Peg blank, Shoe.....	B. F. Sturtevant.....	25,149	Aug. 16, 1859	4	159
Pin-sticking machine.....	J. W. Naramore.....	24,654	July 5, 1859	4	7
Pipe-molding..... (Reissue 1,463) ..	J. Firth and J. Ingham.....	26,486	Dec. 20, 1859	4	640
Pivot-bearings.....	F. C. Lowthorp.....	26,689	Jan. 3, 1860	4	698
Planing-machine for curved surfaces.....	J. B. Grosvenor.....	26,584	Dec. 27, 1859	4	671
Planter, Corn.....	E. C. Allen.....	26,006	Nov. 8, 1859	4	504
Planter, Seed.....	W. Blessing.....	26,410	Dec. 13, 1859	4	614
Porous ware, Manufacture of.....	B. S. & M. R. Pierce.....	26,614	Dec. 27, 1859	4	671
Powder-keg..... (Reissues 1,383, 3,757) ..	J. Wilson, C. Green, and W. Wilson, jr.....	24,772	July 12, 1859	4	36
Pressure-gauge, Steam.....	T. W. Lane.....	23,032	Feb. 22, 1859	3	156
Printing-machine, Railway and other ticket.....	R. M. Hoe.....	23,172	Mar. 8, 1859	3	244
Printing-press, Feeding paper to..... (Reissue 4,429) ..	R. M. Hoe.....	25,199	Aug. 23, 1859	4	185
Prisons, Construction of.....	E. May.....	25,662	Oct. 4, 1859	4	353
Propeller, Screw.....	J. Montgomery.....	23,598	Apr. 12, 1859	3	386
Pump.....	W. Wright.....	26,139	Nov. 15, 1859	4	504
Pump-box.....	F. and J. Stock.....	23,795	Apr. 26, 1859	3	444
Pump, Portable..... (Reissue 1,146) ..	W. T. Vose.....	26,135	Nov. 15, 1859	4	504
Pumping-engine.....	H. R. Worthington.....	24,838	July 19, 1859	4	57
Pyrotechnic night-signal.....	B. F. Coston.....	23,436	Apr. 5, 1859	3	325
R.					
Railway-bar.....	H. Webb.....	24,436	June 14, 1859	3	640
Railway, Dispensing with switches on..... (Reissue 942) ..	W. Wharton, jr.....	26,454	Dec. 13, 1859	4	614
Railway-frog..... (Reissue 1,602) ..	D. D. Lewis.....	24,034	May 17, 1859	3	527
Railway-frog, Elastic.....	G. P. Sanborn and W. Mansfield.....	24,664	July 5, 1859	4	6
Range, Cooking.....	B. W. Dunklee.....	23,665	Apr. 19, 1859	3	415
Rolling-mill.....	J. and G. Fritz.....	25,565	Sept. 27, 1859	4	321
Rolls, Machine for moving iron at the.....	C. Hewitt.....	24,304	June 7, 1859	3	608
Roofing-cement.....	N. A. Dyar.....	23,882	May 3, 1859	3	471
Rope-laying machinery.....	G. W. Pittman and W. C. Boone.....	23,491	Apr. 5, 1859	3	325
Ruling-machine attachment.....	J. B. Blair.....	23,152	Mar. 8, 1859	3	244
S.					
Saddle-tree, Machine for covering.....	J. Maclure.....	25,867	Oct. 18, 1859	4	401
Scales.....	A. Turnbull.....	25,473	Sept. 13, 1859	4	270
Scales, Platform.....	T. Fairbanks.....	26,484	Dec. 20, 1859	4	640
Scales, Platform.....	F. M. Strong and T. Ross.....	24,161	May 24, 1859	3	558
Scales, Weighing.....	F. M. Strong and T. Ross.....	25,148	Aug. 16, 1859	4	159
Screw-tap.....	W. and R. Foster.....	26,487	Dec. 20, 1859	4	640
Seaming-machine, Double.....	L. T. Hulbert.....	26,679	Jan. 3, 1860	4	698
Seaming-machine, Double.....	J. Wilson, G. Green, and W. Wilson, jr.....	23,736	Apr. 19, 1859	3	416
Sewing-machine.....	J. Gray.....	24,022	May 17, 1859	3	527
Sewing-machine..... (Reissue 5,305) ..	W. C. Hicks.....	23,557	Apr. 12, 1859	3	356
Sewing-machine..... (Reissue 1,805) ..	K. Vogel.....	25,692	Oct. 4, 1859	4	353
Skate-fastening..... (Reissue 3,333) ..	J. H. Coe and W. B. Sniffin.....	23,826	May 3, 1859	3	470
Skirt, Skeleton..... (Reissues 870, 2,046) ..	J. Draper.....	25,701	Oct. 4, 1859	4	354
Soles, Channeling boot and shoe..... (Reissue 1,586) ..	M. Wesson.....	24,182	May 24, 1859	3	558
Spectacle-frame..... (Reissue 3,725) ..	T. Noel.....	22,572	Jan. 11, 1859	3	7
Spools, Machine for winding thread on.....	H. Conant.....	26,415	Dec. 13, 1859	3	662
Stamp, Postmarking.....	M. P. Norton.....	25,036	Aug. 9, 1859	4	134
Steam-boiler.....	J. Harrison, jr.....	25,640	Oct. 4, 1859	4	353
Steam-boiler, Skimming-apparatus for.....	A. M. Sprague.....	23,320	Mar. 22, 1859	3	272
Steam-heater for buildings..... (Reissue 4,774) ..	S. F. Gold.....	24,456	June 21, 1859	3	662
Steam-pressure regulator.....	A. P. Pitkin.....	24,402	June 14, 1859	3	640
Stone-sawing machine.....	A. T. Merriman.....	24,478	June 21, 1859	3	662
Stove.....	P. Dodge.....	22,787	Feb. 1, 1859	3	70
Stove.....	E. M. Manigle.....	25,343	Sept. 6, 1859	4	240
Stove..... (Reissues 1,242, 1,622) ..	S. B. Sexton.....	23,716	Apr. 19, 1859	3	416
Stove.....	J. G. Widmann.....	23,970	May 10, 1859	3	497
Stove, Cooking.....	H. G. Leonard.....	23,983	May 10, 1859	3	497
Stove, Cooking..... (Reissues 1,684, 3,027, 3,452) ..	P. P. Stewart.....	22,681	Jan. 18, 1859	3	37
Stove, Cooking..... (Reissues 1,673, 2,915) ..	P. P. Stewart.....	23,622	Apr. 12, 1859	3	386
Stove, Heating..... (Reissues 1,242, 1,622, 1,774, 2,476) ..	S. B. Sexton.....	23,716	Apr. 19, 1859	3	416
Stove, Molding covers for cook.....	G. W. Gardiner.....	23,022	Feb. 22, 1859	3	156
Straw-cutter.....	R. Daniels.....	24,446	June 21, 1859	3	662
Surgical instrument.....	D. Ahl.....	23,996	May 17, 1859	3	527
T.					
Tackle-block..... (Reissues 1,534, 1,932, 3,226) ..	I. E. Palmer.....	25,978	Nov. 1, 1859	4	452
Tailors' shears.....	R. Heinisch.....	25,508	Sept. 20, 1859	4	296
Telegraph, Electro-magnetic..... (Reissue 5,181) ..	M. G. Farmer.....	26,097	Nov. 15, 1859	4	504
Telegraphic machine.....	G. M. Phelps.....	26,003	Nov. 1, 1859	4	452
Till-alarm attachment.....	E. B. White.....	24,635	July 5, 1859	4	7
Tire-upsetting machine.....	C. L. Crowell and R. Smith.....	24,009	May 17, 1859	3	527
Tobacco-stems, Coloring and curing.....	B. Payn.....	22,668	Jan. 13, 1859	3	37
Toy, Elastic.....	L. P. Porter.....	23,001	Feb. 15, 1859	3	127
Truss-spring..... (Reissue 4,589) ..	J. W. Riggs.....	22,674	Jan. 18, 1859	3	37
V.					
Valve, Governor.....	B. Fitts.....	25,005	Aug. 9, 1859	4	134
Vessel, Steam.....	J. Montgomery.....	23,105	Mar. 1, 1859	3	189

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W.					
Wagon-brake, Self-acting	B. S. Healey	25, 115	Aug. 16, 1859	4	158
Watch-case, Manufacture of	J. Boss	23, 820	May 3, 1859	3	470
Water-closet basin	W. Boch, sr.	26, 243	Nov. 29, 1859	4	557
Water-trap	J. A. Lowe	26, 506	Dec. 20, 1859	4	640
Water-trap molding	J. A. Lowe	25, 572	Sept. 27, 1859	4	322
Water-wheel..... (Reissue 1,530)	N. F. Burnham	23, 011	Feb. 22, 1859	3	156
Water-wheel..... (Reissues 979, 5,407)	J. P. Collins	26, 339	Dec. 6, 1859	4	585
Water-wheel..... (Reissue 1,405)	J. Temple	22, 901	Feb. 8, 1859	3	188
Windlass, Method of operating..... (Reissue 5,304)	P. Philip	24, 755	July 12, 1859	4	35
Wood-saw frame..... (Reissue 1,526)	J. Haynes	25, 015	Aug. 9, 1859	4	108
Wooden trough, Machine for manufacturing.....	S. T. Field	22, 792	Feb. 1, 1859	3	70
Wooden-ware, Machine for cutting out.....	G. R. Hay	25, 014	Aug. 9, 1859	4	134
Wrench.....	D. P. Foster	22, 947	Feb. 15, 1859	3	127
Wringing-machine..... (Reissues 1,709, 1,807, 1,934)	J. Allender	22, 539	Jan. 11, 1859	3	7
Wringing machine, Clothes..... (Reissues 1, 710, 2,609)	S. A. Bailey	23, 436	Apr. 5, 1859	3	325

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Invention or discovery.	Name of patentee.	Original No.	Original date.	Disclaimer filed.	Volume of Gazette.	Page of Gazette.
B.						
Bedstead-fastening	L. W. Buxton	23, 525	Apr. 5, 1859	Apr. 1, 1873	3	356
C.						
Canal-lock gate	C. W. Williams	23, 635	Apr. 12, 1859	Apr. 11, 1873	3	386
Car-spring..(Reissued January 6, 1863, No. 1,371, and March 17, 1863, No. 1,431.)	A. B. Davis	22, 941	Feb. 15, 1859	Feb. 10, 1873	3	156
Car-spring..(Reissued January 6, 1863, No. 1,371, and March 17, 1863, No. 1,431.)	A. B. Davis	22, 941	Feb. 15, 1859	Feb. 15, 1873	3	156
F.						
Fire-arm, Breech-loading..(Reissued December 21, 1869, No. 3,770.)	B. Burton	26, 475	Dec. 20, 1859	Dec. 4, 1873	4	641
Flour-packer..(Reissued November 7, 1871, No. 4,626.)	S. Taggart	24, 963	Aug. 2, 1859	July 19, 1873	4	85
G.						
Glove	J. F. Mason	133, 376	Nov. 26, 1872	Apr. 4, 1873	3	356
H.						
Harvester....(Reissued January 15, 1861, No. 1,129) ..	J. Gore	26, 582	Dec. 27, 1859	Dec. 15, 1873	4	671
Harvesting-machine..(Reissued May 17, 1870, No. 3,978.)	M. Young, jr.....	24, 598	June 28, 1859	June 27, 1873	4	7
Hay-spreader.....(Reissued June 1, 1869, No. 3,481) ..	J. C. Stoddard.....	24, 588	June 28, 1859	June 26, 1873	4	7
Horseshoe-machine..(Reissued March 30, 1869, No. 3,354.)	W. W. Lewis.....	22, 812	Feb. 1, 1859	Feb. 13, 1873	3	156
J.						
Jacquard machine.....	A. Babbett.....	25, 796	Oct. 18, 1859	Oct. 11, 1873	4	401
L.						
Ladder, Step	C. C. Udell	90, 973	Mar. 22, 1870	June 9, 1873	3	603
Lasting boots and shoes, Machine for..(Reissued January 6, 1863, No. 1,382.)	J. Purinton	25, 673	Oct. 4, 1859	Sept. 27, 1873	4	354
Lathe-attachment for cutting veneers	B. F. Sturtevant.....	26, 627	Dec. 27, 1859	Dec. 26, 1873	4	671
Looms, Picker-motion for power.....	W. Stearns.....	24, 668	July 5, 1859	June 30, 1873	4	7
M.						
Mail bag	T. J. Lamdin	23, 924	May 10, 1859	May 9, 1873	3	497
Molding and casting apparatus.....	G. Ross	53, 883	Apr. 10, 1866	Jan. 9, 1873	3	38
O.						
Ore-separator.....	W. O. Bourne	24, 367	June 14, 1859	June 11, 1873	3	640
P.						
Paper-folding machine	C. Chambers, jr	23, 445	Apr. 5, 1859	Apr. 4, 1873	3	356
Paper-pulp, Apparatus for the manufacture of..(Reissued July 3, 1860, No. 996, and August 13, 1867, No. 2,730.)	J. B. Palser and G. Howland.....	24, 484	June 21, 1859	June 20, 1873	4	477
Paper-pulp, Apparatus for the manufacture of..(Reissued July 3, 1860, No. 996, and August 13, 1867, No. 2,731.)	J. B. Palser and G. Howland.....	24, 484	June 21, 1859	June 20, 1873	4	478
Passenger-elevator	O. Tufts	25, 061	Aug. 9, 1859	Aug. 7, 1873	4	108
Portable furnace, boiler, and steamer..(Reissued December 13, 1859, No. 864, and October 8, 1872, No. 5,095.)	D. R. Prindle.....	25, 442	Sept. 13, 1859	Sept. 12, 1873	4	270
R.						
Ruffle	G. B. Arnold.....	28, 244	May 8, 1860	Dec. 10, 1873	4	614
S.						
Seal-lock	J. E. Thomson	143, 201	Sept. 23, 1873	Nov. 1, 1873	4	585
Skate-fastening. (Reissued March 3, 1869, No. 3,333) ..	J. H. Coe and W. B. Sniffin.....	23, 826	May 3, 1859	Apr. 30, 1873	3	471
Steam-pressure gage.....	T. W. Lane	23, 032	Feb. 22, 1859	Feb. 15, 1873	3	156
Stove..(Reissued December 3, 1861, No. 1,242, and February 16, 1864, No. 1,622.)	S. B. Sexton	23, 716	Apr. 19, 1859	Apr. 18, 1873	3	416
Stove..(Reissued December 3, 1861, No. 1,242, February 16, 1864, No. 1,622, September 27, 1864, No. 1,774, and February 12, 1867, No. 2,476.)	S. B. Sexton	23, 716	Apr. 19, 1859	Apr. 18, 1873	3	416
W.						
Water-wheel.....(Reissued Feb. 10, 1863, No. 1,405) ..	J. Temple.....	22, 901	Feb. 8, 1859	Feb. 20, 1873	3	189

ALPHABETICAL LIST OF TRADE-MARKS.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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A.					
Agricultural implements	L. W. Rumsey & Co	1, 535	Nov. 18, 1873	4	531
Alpaca	W. R. Lewis	1, 428	Aug. 26, 1873	4	213
Alpaca and mohair	Moore, Tingue & Co	1, 405	Aug. 12, 1873	4	159
Ax and hatchet	The Collins Company	1, 126	Feb. 11, 1873	3	157
Ax and other tools	The Collins Company	1, 328	June 17, 1873	3	663
Axle-grease	The Palm-Oil Axle-Grease Company	1, 437	Sept. 2, 1873	4	242
B.					
Baking-powder	J. H. Lippincott	1, 203	Apr. 8, 1873	3	387
Baking-powder	Woody Brothers	1, 148	Feb. 25, 1873	3	218
Baking-powder	Royal Baking-Powder Company	1, 495	Oct. 14, 1873	4	401
Baking-powders	B. T. Babbitt	1, 529	Nov. 18, 1873	4	531
Beer, Lager	T. Rommeney	1, 327	June 17, 1873	3	663
Beer, Small or root	S. F. Stowe	1, 391	July 29, 1873	4	109
Beverage	S. F. Stowe	1, 298	June 3, 1873	3	609
[Beverage.] Ginger-ale, seltzer, champagne, cider, soda-water, &c.	Berlin Mineral-Water Company	1, 383	July 29, 1873	4	109
Blacking, Boot and shoe	L. Anson & Co	1, 488	Oct. 14, 1873	4	401
Blacking or grease, Shoe	L. Anson & Co	1, 489	Oct. 14, 1873	4	401
Blasting squib and fuse	S. H. Daddow	1, 103	Jan. 21, 1873	3	71
Bluing	H. Sawyer	1, 242	Apr. 29, 1873	3	471
Bobbin, Quill	D. Bass, jr.	1, 362	July 15, 1873	4	58
Bone, horn, hard rubber, &c., Goods made of a composition substitute for.	Greanelle Manufacturing Company	1, 574	Dec. 16, 1873	4	641
Books	D. C. Cutler	1, 309	June 10, 1873	3	640
Boot and shoe	H. H. Bigelow	1, 319	June 17, 1873	3	663
Boot and shoe	Burt & Mears	1, 141	Feb. 18, 1873	3	189
Boot and shoe	T. Emerson's Sons	1, 188	Apr. 1, 1873	3	357
Boot and shoe	T. Emerson's Sons	1, 189	Apr. 1, 1873	3	357
Boot and shoe	C. Merritt	1, 119	Feb. 4, 1873	3	127
Boot and shoe	T. W. Seaverns, jr.	1, 164	Mar. 11, 1873	3	272
Boot and shoe peg	Kearsage Peg Company	1, 466	Sept. 23, 1873	4	322
Boot and shoe peg	Kearsage Peg Company	1, 467	Sept. 23, 1873	4	322
Boot, India-rubber	The L. Candee & Co.	1, 498	Oct. 14, 1873	4	401
Bottle, Cap of cordial	Cazade & Crooks	1, 244	May 6, 1873	3	497
Bottle, Cordial	Cazade & Crooks	1, 246	May 6, 1873	3	497
Bottle, Cordial	Cazade & Crooks	1, 247	May 6, 1873	3	497
Bottle, Brandy	H. Imhorst	1, 376	July 22, 1873	4	85
Braids, gimps, fringes, trimmings, &c.	T. Kohn	1, 283	May 27, 1873	3	586
Brandies	M. Doherty & Co.	1, 479	Sept. 30, 1873	4	354
Brandy, Blackberry	I. A. Jackson & Co.	1, 325	June 17, 1873	3	663
Brandy, Bottles for	Cazade & Crooks	1, 234	Apr. 29, 1873	3	471
Brandy, Bottles of	Cazade & Crooks	1, 200	Apr. 8, 1873	3	387
Bread	MacWilliams & Pieper	1, 158	Mar. 4, 1873	3	245
Brush	I. M. C. Martin	1, 493	Oct. 14, 1873	4	401
Brush, Toilet	Thomson, Langdon & Co	1, 277	May 20, 1873	3	559
Brush, Tooth	S. L. Mintzer	1, 290	June 3, 1873	3	609
Brush, Varnish	E. Clinton & Co	1, 330	June 24, 1873	3	691
Brushes, Varnish and other	C. C. Thum	1, 438	Sept. 2, 1873	4	242
Burner, Gas	A. H. Wood	1, 243	Apr. 29, 1873	3	471
Burning-fluids and liniment	Netterfield & Smith	1, 575	Dec. 16, 1873	4	641
Butter	S. Straight & Son	1, 387	July 29, 1873	4	109
C.					
Candle	G. Delano	1, 251	May 6, 1873	3	497
Candle	Procter & Gamble	1, 192	Apr. 1, 1873	3	357
Cards, Playing	V. E. Mauger	1, 191	Apr. 1, 1873	3	357
Cards, Playing	C. K. Pevey	1, 341	July 1, 1873	4	8
Cards, Playing	C. K. Pevey	1, 348	July 1, 1873	4	8
Cards, Playing	C. K. Pevey	1, 349	July 1, 1873	4	8
Carpet	J. Dornan	1, 571	Dec. 9, 1873	4	615
Carpet, drugget, rug, and mat	J. E. Hughes	1, 420	Aug. 26, 1873	4	212
Cask and package, Whisky	Howe & Hubbell	1, 364	July 15, 1873	4	58
Chair, settee, and car-seat	Gardner Manufacturing Company	1, 289	June 3, 1873	3	609
Champagne	W. Chillingworth & Son	1, 506	Oct. 21, 1873	4	425
Cheese	Webb, Turner & Co.	1, 480	Sept. 30, 1873	4	354
Chemical compound	J. W. Chisholm	1, 157	Mar. 4, 1873	3	245
Cigar	F. De Bary & Co	1, 105	Jan. 21, 1873	3	71
Cigar	F. De Bary & Co	1, 109	Jan. 28, 1873	3	100
Cigar	Gilmor & Gibson	1, 588	Dec. 30, 1873	4	698
Cigar	Goldsmith Brothers & Benjamin	1, 453	Sept. 16, 1873	4	296
Cigar	J. Heller	1, 454	Sept. 16, 1873	4	296
Cigar	S. Jacoby & Co.	1, 111	Jan. 28, 1873	3	100
Cigar	Kerbs & Spiess	1, 179	Mar. 25, 1873	3	326
Cigar	Kerbs & Spiess	1, 180	Mar. 25, 1873	3	326
Cigar	Seidenberg & Co	1, 227	Apr. 22, 1873	3	445
Cigar	T. B. Singerland	1, 541	Nov. 25, 1873	4	558
Cigar and tobacco	The Consolidated Tobacco Company	1, 542	Nov. 25, 1873	4	558
Cigar, cheroots, and cigarettes	F. S. Kinney	1, 365	July 15, 1873	4	58
Cigars, tobacco, and snuff	Batchelor Brothers	1, 278	May 27, 1873	3	586
Cleaning-powder	J. A. Wright & Co	1, 441	Sept. 2, 1873	4	242
Clothes-wringer	Bailey Washing and Wringing Machine Company	1, 130	Feb. 18, 1873	3	189
Clothes-wringer	Bailey Washing and Wringing Machine Company	1, 131	Feb. 18, 1873	3	189
Clothes-wringer	Queen City Wringer Company	1, 494	Oct. 14, 1873	4	401

Alphabetical list of trade-marks—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
				Vol.	Page.
Clothes-wringing machine	Haley, Morse & Co.	1,523	Nov. 11, 1873	4	505
Clothing for women and children	M. Newman & B. Liebman	1,469	Sept. 23, 1873	4	322
Coffee, Ground	Hawley, Bowen & Co.	1,590	Dec. 30, 1873	4	698
Coffee, Roasted	Dilworth Brothers	1,363	July 15, 1873	4	58
Coffee, spice, &c.	W. H. Crawford & Co.	1,153	Mar. 4, 1873	3	245
Colors, dye-stuffs, chemicals, &c.	F. Bredt & Co.	1,263	May 13, 1873	3	527
Cordials, Package of	Cazade & Crooks	1,245	May 6, 1873	3	497
Cord, Solid braided	The Silver Lake Company	1,400	Aug. 5, 1873	4	135
Corn-meal, Kiln-dried	Kipe & Townsend	1,213	Apr. 15, 1873	3	417
Corset	Thomson, Langdon & Co.	1,114	Jan. 28, 1873	3	100
Corset-spring, Steel	F. L. Egbert	1,567	Dec. 9, 1873	4	615
Corset steel springs	F. L. Egbert	1,491	Oct. 14, 1873	4	401
Cosmetic	Miller Brothers	1,224	Apr. 22, 1873	3	445
Cosmetic	W. T. Wenzell	1,334	June 24, 1873	3	691
Cotton-gin	The Brown Cotton-Gin Company	1,570	Dec. 9, 1873	4	615
Cotton-gin	The Gullet Gin-Manufacturing Company	1,410	Aug. 19, 1873	4	185
Crackers, Sponge or butter	J. Fox	1,248	May 6, 1873	3	497
Cranberries, Packages containing	N. H. Bishop	1,352	July 8, 1873	4	36
Cutlery	N. Joseph	1,146	Feb. 25, 1873	3	218
Cutlery	L. T. Meyer	1,533	Nov. 18, 1873	4	531
D.					
Distilled liquors	M. M. Smith & Brothers	1,483	Oct. 7, 1873	4	381
Distilled liquors	M. M. Smith & Brothers	1,484	Oct. 7, 1873	4	381
Distilled liquors	M. M. Smith & Brothers	1,485	Oct. 7, 1873	4	381
Distilled liquors	M. M. Smith & Brothers	1,486	Oct. 7, 1873	4	381
Dresses, Chart and pattern for cutting	W. Cornwell	1,123	Feb. 11, 1873	3	157
Driers, paints, varnishes, &c.	G. C. Liszka	1,536	Nov. 18, 1873	4	531
Druggists' goods	Arnold & McNary	1,299	June 10, 1873	3	640
Dry goods	Emery, Ivey & Lee	1,545	Dec. 2, 1873	4	585
Dyes, Aniline	Wells, Richardson & Co.	1,585	Dec. 23, 1873	4	671
E.					
Emery	Abbott & Howard	1,537	Nov. 25, 1873	4	558
Explosive compound, Dynamite	The Giant-Powder Company and the Atlantic Giant-Powder Company	1,582	Dec. 23, 1873	4	671
Explosive compound, Giant-powder	The Giant-Powder Company and the Atlantic Giant-Powder Company	1,583	Dec. 23, 1873	4	671
Extracts, Flavoring	Steele & Price	1,306	June 10, 1873	3	640
F.					
Fancy and other dry goods	E. Flaxland & Co.	1,414	Aug. 19, 1873	4	185
Fancy and other dry goods	E. Flaxland & Co.	1,415	Aug. 19, 1873	4	185
Fertilizer	G. Dugdale & Co.	1,432	Sept. 2, 1873	4	242
Fertilizer	G. Dugdale & Co.	1,433	Sept. 2, 1873	4	242
Fertilizer	G. Dugdale & Co.	1,440	Sept. 2, 1873	4	242
Fertilizer	G. Dugdale & Co.	1,475	Sept. 30, 1873	4	354
Fertilizer	G. Dugdale & Co.	1,476	Sept. 30, 1873	4	354
Fertilizer	Hunt, Rankin & Lamar	1,345	July 1, 1873	4	8
Fertilizer	Lorentz & Rittler	1,581	Dec. 23, 1873	4	671
Fertilizer	M. J. Solomons	1,411	Aug. 19, 1873	4	185
Fertilizer, Agricultural	O. Wittichen	1,396	Aug. 5, 1873	4	135
Fertilizer, Ammoniated superphosphate	J. M. Rhodes & Co.	1,569	Dec. 9, 1873	4	615
File	Crocker Cutter-Tooth File Company	1,168	Mar. 18, 1873	3	297
File	T. Jowitt & Son	1,161	Jan. 7, 1873	3	7
File and rasp	G. and H. Barnett	1,281	May 27, 1873	3	586
File, rasp, and steel	The Sheffield File-Works	1,350	July 1, 1873	4	8
Fish	The American Sardine Company	1,280	May 27, 1873	3	586
Fish, Cured or smoked	H. Mayo & Co.	1,305	June 10, 1873	3	640
Fish, Prepared and preserved	Dodd, Tarr & Co.	1,478	Sept. 30, 1873	4	354
Fish, Preserved	Ocean Trout Company	1,514	Oct. 28, 1873	4	452
Flour	The Gallego Mills Manufacturing Company	1,266	May 13, 1873	3	527
Flour	Jones, Williams & Faxon	1,229	Apr. 22, 1873	3	445
Flour	Haxall, Crenshaw & Co.	1,512	Oct. 28, 1873	4	452
Flour	Haxall, Crenshaw & Co.	1,513	Oct. 28, 1873	4	452
Flour, Prepared	Hopkins & Co.	1,238	Apr. 29, 1873	3	471
Flue for draft, ventilation, &c.	H. R. Farmer	1,270	May 20, 1873	3	559
Fork, spoon, and other table-ware	C. Rogers & Brothers	1,342	July 1, 1873	4	8
Frillings	F. Browett & Co.	1,233	Apr. 29, 1873	3	471
Frillings, gimps, ribbons, &c.	F. Browett & Co.	1,211	Apr. 15, 1873	3	417
Fruit-jar	The Consolidated Fruit-Jar Company	1,307	June 10, 1873	3	640
Fruit-jar	The Consolidated Fruit-Jar Company	1,308	June 10, 1873	3	640
G.					
Gas-machine	F. W. Ofeldt	1,429	Aug. 26, 1873	4	213
Gin	J. W. Culbert	1,481	Oct. 7, 1873	4	381
Gin	W. P. Sanger	1,150	Feb. 25, 1873	3	218
Gin	F. E. Suire & Co.	1,120	Feb. 4, 1873	3	127
Gin	F. E. Suire & Co.	1,121	Feb. 4, 1873	3	127
Gin	F. E. Suire & Co.	1,122	Feb. 4, 1873	3	127
Glass shades, cylinders, &c.	S. J. Pardessus & Co.	1,515	Oct. 28, 1873	4	452
Glass-ware	T. G. Cook & Co.	1,201	Apr. 8, 1873	3	387
Glove, Kid	F. Hegle	1,532	Nov. 18, 1873	4	531
Gold and silver solutions for electro-plating without a battery	A. B. Morrison	1,534	Nov. 18, 1873	4	531
Gold-foil	S. S. White	1,184	Mar. 25, 1873	3	326
Gold ring	The Dueber Watch-Case Manufacturing Company	1,450	Sept. 9, 1873	4	271
Grinding-mill	I. Straub & Co.	1,497	Oct. 14, 1873	4	401
Grinding-mill	The Straub Mill Company	1,230	Apr. 22, 1873	3	445

Alphabetical list of trade-marks—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
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Grinding-mill.....	A. W. Winall.....	1,295	June 3, 1873	3	609
Guano.....	Guauahau Guano Company.....	1,538	Nov. 25, 1873	4	558
Guano.....	B. M. Rhodes & Co.....	1,395	Aug. 5, 1873	4	135
H.					
Hair-dressing.....	E. A. E. Meyer.....	1,223	Apr. 22, 1873	3	445
Hair-preparation.....	M. T. Clackner.....	1,431	Sept. 2, 1873	4	242
Ham.....	Evans Brothers.....	1,115	Feb. 4, 1873	3	127
Ham, shoulder, bacon, &c.....	W. J. Rieman & Son.....	1,408	Aug. 12, 1873	4	159
Hams and cured meat.....	W. G. Bell & Co.....	1,199	Apr. 8, 1873	3	387
Hams and shoulders of pork.....	F. P. Woodbury.....	1,196	Apr. 1, 1873	3	357
Hams and shoulders of pork.....	F. P. Woodbury.....	1,197	Apr. 1, 1873	3	357
Hams and shoulders of pork.....	F. P. Woodbury.....	1,198	Apr. 1, 1873	3	357
Hams, Sugar-cured.....	Evans, Lippincott & Cunningham.....	1,268	May 13, 1873	3	527
Hams, Sugar-cured.....	Oakford & Co.....	1,346	July 1, 1873	4	8
Hardware, cutlery, guns, pistols, and lead-pencils.....	T. Hessenbruch.....	1,546	Dec. 2, 1873	4	585
Harness dressing and cleaning compound.....	S. E. Cox & Co.....	1,144	Feb. 25, 1873	3	218
Harvester.....	D. M. Osborne & Co.....	1,241	Apr. 29, 1873	3	471
Harvester guard-finger, section-knife, &c.....	Whiteley, Fassler & Kelly.....	1,129	Feb. 11, 1873	3	157
Harvesters, Self-rake, dropper, and reel of.....	Whiteley, Fassler & Kelly.....	1,128	Feb. 11, 1873	3	157
Harvesting-machine.....	Whiteley, Fassler & Kelly.....	1,127	Feb. 11, 1873	3	157
Harvesting-machine, Sections for the cutters of.....	W. A. Wood Mowing and Reaping Machine Company.....	1,262	May 13, 1873	3	527
Hat.....	O. Benedict & Co.....	1,578	Dec. 23, 1873	4	671
Hat.....	O. Benedict & Co.....	1,579	Dec. 23, 1873	4	671
Hat.....	O. Benedict & Co.....	1,580	Dec. 23, 1873	4	671
Hat.....	J. S. Fayerweather & Co.....	1,445	Sept. 9, 1873	4	271
Heater.....	The Gold-Heating Company.....	1,381	July 22, 1873	4	85
Hog products.....	G. Cassard & Son.....	1,301	June 10, 1873	3	640
Hose and belting, Rubber.....	National Rubber Company.....	1,162	Mar. 11, 1873	3	272
Hose, Rubber.....	The Boston Elastic-Fabric Company.....	1,174	Mar. 18, 1873	3	297
Hose, Rubber.....	The Boston Elastic-Fabric Company.....	1,175	Mar. 18, 1873	3	297
Hosiery.....	Smyth & Co.....	1,449	Sept. 9, 1873	4	271
Ice.....	Knickerbocker Ice Company.....	1,524	Nov. 11, 1873	4	505
Ink and varnish printing.....	L. H. Gein.....	1,190	Apr. 1, 1873	3	357
Ink, Burnishing.....	Fletcher & Dwyer.....	1,236	Apr. 29, 1873	3	471
Insect-powder.....	P. Reynard.....	1,326	June 17, 1873	3	663
Iron and steel.....	Leng & Ogden.....	1,482	Oct. 7, 1873	4	381
Iron, Black and galvanized sheet.....	Marshall Brothers & Co.....	1,274	May 20, 1873	3	559
Iron, Galvanized sheet.....	McCullough Iron Company.....	1,117	Feb. 4, 1873	3	127
Iron, Galvanized sheet.....	McCullough Iron Company.....	1,118	Feb. 4, 1873	3	127
K.					
Kaleidoscope.....	C. G. Bush & Co.....	1,417	Aug. 26, 1873	4	212
Knit scarf or tippet.....	J. W. Tuttle.....	1,519	Nov. 4, 1873	4	478
L.					
Lead, White.....	Beymer, Bauman & Co.....	1,439	Sept. 2, 1873	4	242
Leather, Composition for softening, polishing, and preserving.....	J. G. North.....	1,386	July 29, 1873	4	109
Licorice, Mass.....	Hoffman, Lee & Co.....	1,455	Sept. 16, 1873	4	296
Licorice-paste.....	D. V. Arquimbau.....	1,361	July 15, 1873	4	58
Licorice-paste.....	D. V. Arquimbau.....	1,442	Sept. 9, 1873	4	271
Licorice-paste.....	Hoffman, Lee & Co.....	1,456	Sept. 16, 1873	4	296
Liniment.....	W. Kidder.....	1,587	Dec. 23, 1873	4	671
Liniment.....	Merchant's Gargling-Oil Company.....	1,214	Apr. 15, 1873	3	417
Liniment.....	Merchant's Gargling-Oil Company.....	1,215	Apr. 15, 1873	3	417
Liniment.....	W. H. Rainey.....	1,422	Aug. 26, 1873	4	212
Liniment.....	I. Vallier.....	1,563	Dec. 2, 1873	4	586
Liquors, Spirituous.....	G. W. Kidd & Co.....	1,468	Sept. 23, 1873	4	322
Liquors, wines, bitters, sirups, and cordials.....	W. S. Dunham.....	1,340	July 1, 1873	4	8
Lozenges and sirup.....	Townsend & Co.....	1,210	Apr. 8, 1873	3	387
Lubricating compound.....	Gerdorn, Cook & Co.....	1,212	Apr. 15, 1873	3	417
M.					
Maizola, (a product of corn).....	Warder & Cooper.....	1,165	Mar. 11, 1873	3	272
Meat and smoked beef, Sugar-cured.....	G. Phipps & Co.....	1,354	July 8, 1873	4	36
Meat, Cured.....	W. H. Davis & Co.....	1,566	Dec. 9, 1873	4	615
Medal.....	Hartell & Letchworth.....	1,271	May 20, 1873	3	559
Medicated liquor.....	M. Verguole.....	1,409	Aug. 12, 1873	4	159
Medicated Manila paper.....	J. Robertson.....	1,458	Sept. 16, 1873	4	296
Medicine.....	F. W. Barnum & Co.....	1,329	June 24, 1873	3	691
Medicine.....	S. Bonsall.....	1,451	Sept. 16, 1873	4	296
Medicine.....	C. D. Bradley.....	1,389	July 29, 1873	4	109
Medicine.....	E. R. Burnham.....	1,282	May 27, 1873	3	586
Medicine.....	S. De Grath.....	1,302	June 10, 1873	3	640
Medicine.....	S. De Grath.....	1,394	Aug. 5, 1873	4	135
Medicine.....	D. Dick.....	1,373	July 22, 1873	4	85
Medicine.....	T. S. Fellows and J. R. Smith.....	1,403	Aug. 12, 1873	4	159
Medicine.....	Fenton Manufacturing Company.....	1,446	Sept. 9, 1873	4	271
Medicine.....	E. Frese.....	1,124	Feb. 11, 1873	3	157
Medicine.....	H. W. Fuller.....	1,265	May 13, 1873	3	527
Medicine.....	J. L. Graham.....	1,501	Oct. 14, 1873	4	401
Medicine.....	W. H. Gregg & Co.....	1,531	Nov. 18, 1873	4	531
Medicine.....	J. H. Hopkins.....	1,206	Apr. 8, 1873	3	387
Medicine.....	R. Hoyt.....	1,178	Mar. 25, 1873	3	326
Medicine.....	Pacific Balm Company.....	1,284	May 27, 1873	3	586
Medicine.....	D. Ransom, Son & Co.....	1,257	May 13, 1873	3	527
Medicine.....	D. Ransom, Son & Co.....	1,258	May 13, 1873	3	527

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Medicine.....	D. Ransom, Son & Co.....	1,259	May 13, 1873	3	527
Medicine.....	D. Ransom, Son & Co.....	1,260	May 13, 1873	3	527
Medicine.....	D. Ransom, Son & Co.....	1,261	May 13, 1873	3	527
Medicine.....	R. Rattinger.....	1,193	Apr. 1, 1873	3	357
Medicine.....	H. A. Tilden.....	1,156	Mar. 4, 1873	3	245
Medicine.....	D. D. Tomlinson.....	1,195	Apr. 1, 1873	3	357
Medicine.....	E. M. Tubbs & Co.....	1,313	June 10, 1873	3	640
Medicine.....	Willson Carbulated Cod-Liver Oil Co.....	1,392	July 29, 1873	4	109
Medicine.....	C. C. Zimmerman.....	1,296	June 3, 1873	3	609
[Medicine.] Balsam, Cough.....	F. W. Kinsman.....	1,171	Mar. 18, 1873	3	297
[Medicine.] Bitters.....	J. Cleve.....	1,204	Apr. 8, 1873	3	387
[Medicine.] Bitters.....	W. H. Knoeppel.....	1,112	Jan. 28, 1873	3	100
[Medicine.] Castor-oil pills.....	W. Scruton.....	1,424	Aug. 26, 1873	4	212
[Medicine.] Fever and ague cure.....	H. Van Riper and J. G. Beach.....	1,477	Sept. 30, 1873	4	354
Medicine for rheumatism.....	Moyer & Co.....	1,564	Dec. 2, 1873	4	526
Medicine, Globule for homœopathic.....	Smith & Parks.....	1,369	July 15, 1873	4	58
[Medicine.] Pile remedy.....	J. P. Miller.....	1,216	Apr. 15, 1873	3	417
[Medicine.] Pile remedy.....	M. H. Stoner.....	1,151	Feb. 25, 1873	3	218
[Medicine.] Toothache preparation.....	R. A. Tracy.....	1,351	July 1, 1873	4	8
Men's furnishing goods.....	Fisk, Clark & Flagg.....	1,434	Sept. 2, 1873	4	242
Metal and journal bearings, Anti-friction.....	I X L Metal Company.....	1,116	Feb. 4, 1873	3	127
Motto-papers.....	T. Van Skelline.....	1,584	Dec. 23, 1873	4	671
N.					
Nails, Selected.....	J. Coyne.....	1,413	Aug. 19, 1873	4	185
O.					
Oatmeal.....	J. McCann.....	1,569	Oct. 21, 1873	4	426
Oil.....	M., T. D., and S. Hodgkinson.....	1,324	June 17, 1873	3	663
Oil-can or package.....	Meissner, Ackermann & Co.....	1,357	July 8, 1873	4	36
Oil, Clock and watch.....	E. Kelley.....	1,249	May 6, 1873	3	497
Oil, Coal.....	W. A. Kowalski.....	1,133	Feb. 18, 1873	3	189
Oil, Cod-liver.....	H. M. Rogers & Co.....	1,312	June 10, 1873	3	640
Oil for medical purposes.....	M. S. Goodrich & Co.....	1,237	Apr. 29, 1873	3	471
Oil, Illuminating.....	The Devoe Manufacturing Company.....	1,337	June 24, 1873	3	691
Oil, Illuminating.....	The Devoe Manufacturing Company.....	1,338	June 24, 1873	3	691
Oil, Lubricating.....	Leonard & Ellis.....	1,502	Oct. 14, 1873	4	401
Oil, Medicinal.....	E. F. Libby.....	1,252	May 6, 1873	3	497
Ointment, Salt-rheum.....	F. H. Kimberly.....	1,239	Apr. 29, 1873	3	471
Opera-glasses, field-glasses, and other telescopes.....	Stassfeld, Lorsch & Co.....	1,231	Apr. 22, 1873	3	445
Organ.....	G. Woods & Co.....	1,544	Nov. 25, 1873	4	558
Oysters.....	O. W. Miller & Co.....	1,573	Dec. 9, 1873	4	615
Oysters and fruits, Packed.....	Barnes, Adams & Co.....	1,474	Sept. 30, 1873	4	354
Oysters, fruits, and vegetables, Packed.....	Wentz & Barndollar.....	1,412	Aug. 19, 1873	4	185
P.					
Packing for engine, Steam.....	The Silver Lake Company.....	1,397	Aug. 5, 1873	4	135
Packing for engine, Steam.....	The Silver Lake Company.....	1,398	Aug. 5, 1873	4	135
Packing for engine, Steam.....	The Silver Lake Company.....	1,399	Aug. 5, 1873	4	135
Packing for railway-car journal-boxes.....	P. S. Devlan.....	1,463	Sept. 23, 1873	4	322
Packing, Miller's soap-stone.....	Sellers Brothers.....	1,379	July 22, 1873	4	85
Packing, &c., Steam.....	J. Glauding & Co.....	1,436	Sept. 2, 1873	4	242
Packing, &c., Steam.....	J. Glauding & Co.....	1,435	Sept. 2, 1873	4	242
Paint.....	H. P. Webb.....	1,336	June 24, 1873	3	691
Paint and colors.....	Harrison Brothers & Co.....	1,202	Apr. 8, 1873	3	387
Paint and colors.....	McClosky Brother & Co.....	1,404	Aug. 12, 1873	4	159
Paint, Metallic.....	Prince's Metallic Paint Company.....	1,135	Feb. 18, 1873	3	189
Paint, Metallic.....	Prince's Metallic Paint Company.....	1,406	Aug. 12, 1873	4	159
Paint, Rubber.....	The Rubber Paint Company.....	1,208	Apr. 8, 1873	3	387
Paint, Rubber.....	The Rubber Paint Company.....	1,209	Apr. 8, 1873	3	387
Paint, White zinc.....	Wadsworth Brothers & Co.....	1,285	May 27, 1873	3	586
Paper, Bluing.....	Dole Brothers.....	1,384	July 29, 1873	4	109
Paper, Writing.....	S. Beach.....	1,107	Jan. 23, 1873	3	100
Paper, Apple.....	D. H. Goodell.....	1,385	July 29, 1873	4	109
Patterns, Dress.....	The Domestic Sewing-Machine Company.....	1,402	Aug. 12, 1873	4	159
Patterns of paper, cloth, &c.....	The Domestic Sewing-Machine Company.....	1,401	Aug. 12, 1873	4	159
Pen, Gold.....	C. M. Fisher.....	1,522	Nov. 11, 1873	4	505
Pencil.....	American Lead-Pencil Company.....	1,430	Sept. 2, 1873	4	242
Pepsin.....	Lilly & Phelan.....	1,421	Aug. 26, 1873	4	212
Perfume, medicine, &c.....	G. J. Wenck.....	1,577	Dec. 16, 1873	4	641
Perfumery.....	T. E. Jenkins.....	1,356	July 8, 1873	4	36
Perfumery and toilet articles.....	F. Prot & Co.....	1,540	Nov. 25, 1873	4	558
Petroleum.....	The Atlantic Refining Company.....	1,460	Sept. 16, 1873	4	296
Petroleum.....	Brown Brothers.....	1,286	June 3, 1873	3	608
Petroleum, Product of.....	J. Chandler.....	1,176	Mar. 25, 1873	3	326
Petroleum, Refined.....	C. West & Sons.....	1,520	Nov. 4, 1873	4	478
Pickle and sauce.....	Crane & Co.....	1,145	Feb. 25, 1873	3	218
Pistol, Revolving.....	Merwin, Hulbert & Co.....	1,322	June 17, 1873	3	663
Pistol, Revolving.....	Merwin, Hulbert & Co.....	1,323	June 17, 1873	3	663
Pitcher, Ice.....	Adams, Hallock & Co.....	1,527	Nov. 18, 1873	4	531
Plow.....	Hunter & Frost.....	1,539	Nov. 25, 1873	4	558
Plow.....	J. Oliver.....	1,275	May 20, 1873	3	559
Plow.....	E. Remington & Son.....	1,149	Feb. 25, 1873	3	218
Polishing material.....	Coffin, Reddington & Co.....	1,267	May 13, 1873	3	527
Preserved and canned food.....	Gordon & Dilworth.....	1,508	Oct. 21, 1873	4	426
Preserved, canned, or bottled vegetables, fruits, pickles, sauces, and honey.....	Sleeper, Wells & Aldrich.....	1,355	July 8, 1873	4	36
Printed publications.....	F. and J. Rives & G. A. Bailey.....	1,163	Mar. 11, 1873	3	272
Printed publications.....	D. Williams.....	1,152	Feb. 25, 1873	3	218
Printing-press.....	J. C. Tripp.....	1,106	Jan. 21, 1873	3	71
Prints.....	J. R. Osgood & Co.....	1,217	Apr. 15, 1873	3	417
Pruning-shears.....	Christy & Hughes.....	1,108	Jan. 28, 1873	3	100

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Pump, Fountain	J. A. Whitman	1, 339	June 24, 1873	3	691
Pyroxyline, Compound of	Celluloid Manufacturing Company	1, 102	Jan. 14, 1873	3	38
Q.					
Quicksilver-flask	The Quicksilver Mining Company	1, 499	Oct. 14, 1873	4	401
R.					
Radish, Horse	Heinz, Noble & Co.	1, 426	Aug. 26, 1873	4	213
Railway-grease	A. Gunnison & Co.	1, 353	July 8, 1873	4	36
Raisins	F. C. Lewis	1, 310	June 10, 1873	3	640
Rake-handle	Smith & Montross	1, 240	Apr. 29, 1873	3	471
Razor	H. Boker & Co.	1, 504	Oct. 21, 1873	4	425
Razor and cutlery	Friedmann & Lauterjung	1, 367	July 15, 1873	4	58
Rubber-goods	M. A. Cately	1, 505	Oct. 21, 1873	4	425
Ruffles and dress-trimmings	J. V. Rockwell	1, 194	Apr. 1, 1873	3	357
S.					
Saddle-tree	S. E. Tompkins & Co.	1, 366	July 15, 1873	4	58
Saddle-tree	S. E. Tompkins	1, 589	Dec. 30, 1873	4	698
Salmon, Packed fresh	L. H. Newton	1, 125	Feb. 11, 1873	3	157
Salt	Stone & Spencer	1, 276	May 20, 1873	3	559
Salve	L. Harwood & Son	1, 272	May 20, 1873	3	559
Salve	G. Long	1, 147	Feb. 25, 1873	3	218
Salve, Eye	W. T. Blow	1, 142	Feb. 25, 1873	3	218
Sauce	S. P. Agresta & A. Menucci	1, 503	Oct. 21, 1873	4	425
Sauce, Celery	Heinz, Noble & Co.	1, 425	Aug. 26, 1873	4	212
Sauce, Table	J. K. MacGowan & Co.	1, 134	Feb. 18, 1873	3	189
Saw, Cross-cut wood	E. C. Atkins & Co.	1, 371	July 22, 1873	4	85
Saw, tool, steel, and file	H. Disston & Sons	1, 452	Sept. 16, 1873	4	296
Saw, tool, steel, and file	H. Disston & Sons	1, 464	Sept. 23, 1873	4	322
Scarf, tie, and bow	Brownson Brothers & Co.	1, 372	July 22, 1873	4	85
Sealing-wax	R. B. Dovell's Son	1, 235	Apr. 29, 1873	3	471
Seeds	D. M. Ferry & Co.	1, 447	Sept. 9, 1873	4	271
Seeds, bulbs, vines, and cuttings	Chase Brothers & Woodward	1, 418	Aug. 26, 1873	4	212
Sewing-machine needle, Cold-swaged	Bridgeport Cold-Swaged Needle Co.	1, 232	Apr. 29, 1873	3	471
Sewing-machine shuttle, Machine-wound bobbin or spool for	J. H. Bullard	1, 344	July 1, 1873	4	8
Shingle	L. M. Blakely	1, 511	Oct. 28, 1873	4	452
Shirt	W. A. Farr & Co.	1, 288	June 3, 1873	3	609
Shirt	Finley, Gourlay & Finch	1, 465	Sept. 23, 1873	4	322
Shirt	C. W. Jenks	1, 100	Jan. 7, 1873	3	7
Shirt	Kohn, Leberman & Co.	1, 492	Oct. 14, 1873	4	401
Shirt, shirt-fronts, &c.	L. Sternberger	1, 154	Mar. 4, 1873	3	245
Shirts, Linen and muslin	T. J. Irving & Co.	1, 161	Mar. 11, 1873	3	272
Shirtings	J. L. Moss, jr., and N. F. Moss	1, 358	July 8, 1873	4	36
Shoe	G. A. Reynolds	1, 407	Aug. 12, 1873	4	159
Shoes, Ladies' and children's	Kenny & McPartland	1, 516	Nov. 4, 1873	4	478
Silicias and goods of like character	Leshner, Whitman & Co.	1, 304	June 10, 1873	3	640
Silk fabrics and "passemeterie" goods, Woven	Bernstein & Mack	1, 461	Sept. 23, 1873	4	322
Sirup	Fairbanks & Gilman	1, 169	Mar. 18, 1873	3	297
Sirup	Fairbanks & Gilman	1, 170	Mar. 18, 1873	3	297
Slate, Roofing	T. W. Parry	1, 347	July 1, 1873	4	8
Snap-hook	The New York Wire-Snap Company	1, 510	Oct. 21, 1873	4	426
Soap	R. W. Bell & Co.	1, 218	Apr. 22, 1873	3	445
Soap	R. M. Bishop & Co.	1, 565	Dec. 9, 1873	4	615
Soap	J. O. Draper & Co.	1, 390	July 29, 1873	4	109
Soap	J. Eavenson & Sons	1, 586	Dec. 23, 1873	4	671
Soap	J. S. and T. Elkinton	1, 160	Mar. 11, 1873	3	272
Soap	J. Oakley & Co.	1, 291	June 3, 1873	3	609
Soap	Sherwood & Genin	1, 343	July 1, 1873	4	8
Soap	W. L. Troxell	1, 487	Oct. 7, 1873	4	381
Soap	J. B. Williams & Co.	1, 185	Mar. 25, 1873	3	326
Soap	J. B. Williams & Co.	1, 186	Mar. 25, 1873	3	326
Soap, Hard	O. Cutts & Co.	1, 462	Sept. 23, 1873	4	322
Soap-powders	B. T. Babbitt	1, 528	Nov. 18, 1873	4	531
Spice for seasoning meat, Compound	E. R. Durkee & Co.	1, 530	Nov. 18, 1873	4	531
Spice, mustard, soda, and cream of tartar	E. R. Durkee & Co.	1, 419	Aug. 26, 1873	4	212
Spoon, fork, &c.	Hall, Elton & Co.	1, 110	Jan. 28, 1873	3	100
Starch	Procter & Gamble	1, 226	Apr. 22, 1873	3	445
Starch, Rice	W. J. Rand	1, 269	May 13, 1873	3	527
Steam-gage and engine-room fixtures	The Utica Steam-gage Company	1, 382	July 22, 1873	4	85
Steel and iron	Leng & Ogden	1, 377	July 22, 1873	4	85
Steel and iron ware	Sweet, Barnes & Co.	1, 380	July 22, 1873	4	85
Stocking-supporter, clasps, and suspenders	C. A. Straw	1, 335	June 24, 1873	3	691
Stove	W. J. Keep	1, 457	Sept. 16, 1873	4	296
Stove	J. Spear & Co.	1, 496	Oct. 14, 1873	4	401
Stove	The Union Stove and Manufacturing Company	1, 518	Nov. 4, 1873	4	478
Stove, Cooking	Bussey, McLeod & Co.	1, 182	Mar. 25, 1873	3	326
Stove, Cylinder	Southard, Robertson & Co.	1, 370	July 15, 1873	4	58
Stove, heater, and range	Hicks & Wolfe	1, 303	June 10, 1873	3	640
Stove-polish	Fletcher & Dwyer	1, 375	July 22, 1873	4	85
Sugar and lemons, Compound of	Preston & Merrill	1, 183	Mar. 25, 1873	3	326
T.					
Tea and coffee	The Great Eastern Tea Company	1, 543	Nov. 25, 1873	4	558
Teas	Newton Brothers & Co.	1, 470	Sept. 23, 1873	4	322
Thermometer-tube	The Buffalo Dental Manufacturing Company	1, 525	Nov. 11, 1873	4	505
Tobacco and snuff	G. W. Gail & Ax	1, 320	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1, 137	Feb. 18, 1873	3	189
Tobacco, Chewing	Allen & Ellis	1, 138	Feb. 18, 1873	3	189

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Tobacco, Chewing	Allen & Ellis	1, 139	Feb. 18, 1873	3	189
Tobacco, Chewing	Allen & Ellis	1, 314	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1, 315	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1, 316	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1, 317	June 17, 1873	3	663
Tobacco, Chewing	Allen & Ellis	1, 318	June 17, 1873	3	663
Tobacco, Chewing	Walker, McGraw & Co	1, 250	May 6, 1873	3	497
Tobacco, Chewing	Wall, Belvin & Day	1, 388	July 29, 1873	4	109
Tobacco, Fine-cut chewing	Walker, McGraw & Co	1, 136	Feb. 18, 1873	3	189
Tobacco, Fine-cut chewing and smoking	Robinson Tobacco Manufacturing Company.	1, 173	Mar. 18, 1873	3	297
Tobacco, Leaf	Weiss, Eller & Kaepfel	1, 471	Sept. 23, 1873	4	322
Tobacco, Leaf	Weiss, Eller & Kaepfel	1, 472	Sept. 23, 1873	4	322
Tobacco, Manufactured	J. W. Stone	1, 155	Mar. 4, 1873	3	245
Tobacco, Plug chewing	Earickson & Harris	1, 132	Feb. 18, 1873	3	189
Tobacco, Plug chewing	Liggett & Myers	1, 253	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1, 254	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1, 255	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1, 256	May 6, 1873	3	497
Tobacco, Plug chewing	Liggett & Myers	1, 311	June 10, 1873	3	640
Tobacco, Plug chewing	Liggett & Myers	1, 331	June 24, 1873	3	691
Tobacco, Plug chewing	Liggett & Myers	1, 332	June 24, 1873	3	691
Tobacco, Smoking	Loewenthal, Kaufman & Co	1, 378	July 22, 1873	4	85
Tobacco, Smoking	Robinson Tobacco Manufacturing Company.	1, 172	Mar. 18, 1873	3	297
Tobacco, Smoking	J. W. Stone	1, 159	Mar. 4, 1873	3	245
Tobacco, Smoking and chewing	L. Bremer's Sons	1, 166	Mar. 18, 1873	3	297
Tobacco, Smoking and chewing	L. Bremer's Sons	1, 167	Mar. 18, 1873	3	297
Towel, Rough bathing	The Stark Mills	1, 360	July 8, 1873	4	36
Toy-wheel	S. T. Wheelwright and C. L. Locke	1, 521	Nov. 4, 1873	4	478
Trimmings for ladies' wear	Erskine & Co	1, 205	Apr. 8, 1873	3	387
U.					
Umbrella	A. M. & R. Davies	1, 507	Oct. 21, 1873	4	426
Umbrella and parasol	Dawes & Fanning	1, 104	Jan. 21, 1873	3	71
V.					
Varnish	L. L. Mandel	1, 368	July 15, 1873	4	58
W.					
Watch	Courvoisier, Wilcox & Co	1, 287	June 3, 1873	3	608
Watch	The National Watch Company	1, 526	Nov. 11, 1873	4	505
Watch	The National Watch Company	1, 547	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 548	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 549	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 550	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 551	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 552	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 553	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 554	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 555	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 556	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 557	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 558	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 559	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 560	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 561	Dec. 2, 1873	4	585
Watch	The National Watch Company	1, 562	Dec. 2, 1873	4	585
Watch and watch materials	Bourquin Brothers	1, 187	Apr. 1, 1873	3	357
Watch-case	J. C. Dueber	1, 444	Sept. 9, 1873	4	271
Watch-glass	J. B. Laurencot	1, 273	May 20, 1873	3	559
Water-gage for steam-boiler	Tomey & Sons	1, 359	July 8, 1873	4	36
Water, Mineral	C. & E. E. Dunbar	1, 374	July 22, 1873	4	85
Water, Mineral	The Siloam Mineral-Spring Company	1, 228	Apr. 22, 1873	3	445
Wheat, Pearl	J. B. Clow	1, 143	Feb. 25, 1873	3	218
Whisky	J. Bumgardner & Sons	1, 300	June 10, 1873	3	640
Whisky	J. E. Cassidy	1, 393	Aug. 5, 1873	4	135
Whisky	Derby & Day	1, 443	Sept. 9, 1873	4	271
Whisky	B. H. Engelke	1, 177	Mar. 25, 1873	3	326
Whisky	Flack Brothers	1, 140	Feb. 18, 1873	3	189
Whisky	W. M. Fliess & Co	1, 448	Sept. 9, 1873	4	271
Whisky	Hastings & Berlin	1, 321	June 17, 1873	3	663
Whisky	E. Howe	1, 572	Dec. 9, 1873	4	615
Whisky	Livingston & Co	1, 517	Nov. 4, 1873	4	478
Whisky	J. J. McClelland	1, 181	Mar. 25, 1873	3	326
Whisky	Morehead, Young & Co	1, 207	Apr. 8, 1873	3	387
Whisky	J. T. M. Orendorf	1, 297	June 3, 1873	3	609
Whisky	D. Porter	1, 576	Dec. 16, 1873	4	641
Whisky	Walsh, Brooks & Kellogg	1, 292	June 3, 1873	3	609
Whisky	Walsh, Brooks & Kellogg	1, 293	June 3, 1873	3	609
Whisky	Walsh, Brooks & Kellogg	1, 294	June 3, 1873	3	609
Whisky, Barrel of	Derby & Day	1, 490	Oct. 14, 1873	4	401
Whisky, Barrel of	W. S. Stewart	1, 459	Sept. 16, 1873	4	296
Whisky, Bourbon	Du Vivier & Co	1, 219	Apr. 22, 1873	3	445
Whisky, Bourbon	Du Vivier & Co	1, 221	Apr. 22, 1873	3	445
Whisky, Bourbon	E. A. Fargo & Co	1, 568	Dec. 9, 1873	4	615
Whisky, Bourbon	H. Livingston	1, 279	May 27, 1873	3	586
Whisky, Rye	Du Vivier & Co	1, 220	Apr. 22, 1873	3	445
Whisky, Rye	Du Vivier & Co	1, 222	Apr. 22, 1873	3	445
Whisky, Rye	T. L. Hume	1, 427	Aug. 26, 1873	4	213
Windmill	Atwood & Bodwell	1, 473	Sept. 30, 1873	4	354
Window and mirror polish	H. M. Wade	1, 500	Oct. 14, 1873	4	401

Alphabetical list of trade-marks—Continued.

Invention or discovery.	Name of patentee.	No.	Date.	Official Gazette.	
				Vol.	Page.
Wine and liquors.....	Morrow, Chamberlin & Co.....	1,333	June 24, 1873	3	691
Wine and liquors.....	O. Schloemer.....	1,423	Aug. 26, 1873	4	212
Wine, Champagne.....	F. De Bary & Co.....	1,099	Jan. 7, 1873	3	7
Wines, liquors, beer, mineral water, &c.....	S. McCullagh.....	1,416	Aug. 19, 1873	4	185
Woolen goods.....	G. F. Ellis.....	1,264	May 13, 1873	3	527
Y.					
Yeast-powder.....	Preston & Merrill.....	1,225	Apr. 22, 1873	3	445

Senate documents

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